

Safety Data Sheet

Issue Date 16-Jul-2015 Revision Date 16-Jul-2015 Revision Number 10

1. IDENTIFICATION

Product identifier

Product Code F041-0001
Product Name THINNER CLEAR

Other means of identification

Common Name NO. 1 THINNER

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Specific target organ toxicity (repeated exposure)	Category 1
Aspiration toxicity	Category 1
Flammable Liquids	Category 3

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Causes damage to organs through prolonged or repeated exposure

May be fatal if swallowed and enters airways

Flammable liquid and vapor



Appearance opaque Physical state liquid Odor aromatic

Precautionary Statements

Prevention

Do not breathe dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/mixing/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Wear protective gloves/protective clothing/eye protection/face protection

Response

Get medical advice/attention if you feel unwell

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store locked up

Store in a well-ventilated place. Keep cool

Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

May be harmful if swallowed
May be harmful in contact with skin
Harmful to aquatic life with long lasting effects

SEE SAFETY DATA SHEET

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
SOLVENT NAPHTHA	64742-88-7	60 - 100%

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes. If eye irritation persists,

consult a specialist.

Skin contactWash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If skin irritation persists, call a physician.

Inhalation Remove affected individual to fresh air. Treat symptomatically. If breathing is difficult,

administer oxygen. If breathing has stopped give artificial respiration. Consult a physician.

Ingestion Call a physician immediately. Never give anything by mouth to an unconscious person. Do

not induce vomiting without medical advice.

Most important symptoms and effects, both acute and delayed

Notes to physician Aspiration hazard.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic

compounds. Carbon oxides. Hydrocarbons.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all

sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment Remove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

Methods for cleaning up If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated

absorbent, container and unused contents in accordance with local, state and federal

regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Close container after each use. Avoid contact with eyes, skin and clothing. Do not eat, drink

or smoke when using this product. If splashes are likely to occur, wear goggles. Wear protective gloves/clothing. Do not burn, or use a cutting torch on, the empty drum. When used in a mixture, read the labels and safety data sheets of all components. Wash

thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Close container after each use. Keep away from heat, sparks and flame. Use only in an

area containing flame proof equipment. Prevent build-up of vapors by opening all windows

and doors to achieve cross ventilation. Keep out of the reach of children.

Incompatible products Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Appropriate engineering controls

Engineering measures Sufficient ventilation, in volume and pattern, should be provided through both local and

general exhaust to keep the air contaminant concentration below current applicable OSHA

Permissible Exposure Limits (PEL) and ACGIH's Threshold Limit Values (TLV).

Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Safety glasses with side-shields If splashes are likely to occur, wear face-shield.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

Respiratory protectionUse only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

AppearanceopaqueOdoraromatic

Color No information available Odor threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks</u>

pH No data available
Melting point / freezing point No data available

Boiling point / boiling range 271 °C / 519 °F

Flash point 38 °C / 100 °F Pensky Martens - Closed Cup

Evaporation rate No data available

Flammability (solid, gas)

Flammability Limit in Air

Not applicable
No data available

Upper flammability limit N/A
Lower flammability limit 1.0

Vapor pressureNo data availableVapor densityNo data available

Specific gravity 0.77458 g/cm3

Water solubility Insoluble in cold water

Solubility in other solventsNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableKinematic viscosityNo data availableDynamic viscosityNo data available

Other Information

Density 6.45999 lbs/gal Volatile organic compounds (VOC) 6.45999 lbs/gal

content

Total volatiles weight percent 100 % Total volatiles volume percent 100 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact Irritating to eyes.

Skin contact Irritating to skin.

Ingestion Harmful if swallowed. Potential for aspiration if swallowed. Aspiration may cause pulmonary

edema and pneumonitis.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
SOLVENT NAPHTHA	> 5000 mg/kg (Rat)	= 3000 mg/kg (Rabbit)	> 5.28 mg/L (Rat) 4 h
64742-88-7			

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Eye Damage.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity NOTICE: Reports have associated repeated and prolonged occupational overexposure to

solvents with permanent brain and nervous system damage. Intentional misuse by

deliberately concentrating and inhaling the contents may be harmful or fatal.

Sensitization No information available.

Mutagenicity No information available.

Carcinogenicity There are no known carcinogenic chemicals in this product.

Reproductive effects No information available.

STOT - single exposure Skin, Eyes, Central Nervous System (CNS)

STOT - repeated exposure Target organ effectsCauses damage to organs through prolonged or repeated exposure
Central nervous system, Eyes, kidney, respiratory system, liver, Skin.

Aspiration hazard Risk of serious damage to the lungs (by aspiration).

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
SOLVENT NAPHTHA	450: 96 h Pseudokirchneriella	800: 96 h Pimephales promelas	100: 48 h Daphnia magna mg/L
64742-88-7	subcapitata mg/L EC50	mg/L LC50 static	EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Paint related material

IATA

UN/ID no. 1993

Proper Shipping Name Paint related material

Hazard Class 3
Packing Group III
ERG Code 366

Additional information Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA Complies Complies DSL/NDSL Complies **EINECS/ELINCS** Complies **ENCS IECSC** Complies Complies **KECL** Complies **PICCS AICS** Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

SARA 311/312 Hazardous

Categorization

Acute Health Hazard Yes
Chronic Health Hazard No
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

CERCLA

United States of America

California Prop. 65

This product does not contain any Proposition 65 chemicals

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

F041-0001 THINNER CLEAR

Revision Date 16-Jul-2015

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
SOLVENT NAPHTHA	X		
64742-88-7			

16. OTHER INFORMATION

NFPA Health 2 Flammability 2 Instability 1 Physical hazard -

HMIS (Hazardous Health 2 Flammability 2 Reactivity 1

Material Information

System)

Prepared By Tnemec Regulatory Dept: 816-474-3400

Revision Date 16-Jul-2015

Revision Summary 9 4 5 7 10 8 11 14 1 15

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of MSDS



Safety Data Sheet

Issue Date 12-Jul-2015 Revision Date 12-Jul-2015 Revision Number 23

1. IDENTIFICATION

Product identifier

Product Code F041-0002 Product Name THINNER CLEAR

Other means of identification

Common Name NO. 2 THINNER

UN/ID no. 1307

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised againstConsumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Flammable Liquids	Category 3

Label elements

EMERGENCY OVERVIEW

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Danger			

Hazard statements

Harmful if swallowed

Harmful in contact with skin

Harmful if inhaled

Causes skin irritation

Causes serious eye irritation

Suspected of causing cancer

May cause respiratory irritation. May cause drowsiness or dizziness

May cause damage to organs through prolonged or repeated exposure

May be fatal if swallowed and enters airways

Flammable liquid and vapor



Appearance opaque

Physical state liquid

Odor aromatic

Precautionary Statements

Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/mixing/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

Response

IF exposed or concerned: Get medical advice/attention

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

Call a POISON CENTER or doctor/physician if you feel unwell

If skin irritation occurs: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Rinse mouth

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

Toxic to aquatic life with long lasting effects

SEE SAFETY DATA SHEET

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
XYLENE	1330-20-7	60 - 100%
ETHYL BENZENE	100-41-4	10 - 30%

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact Flush immediately with large amounts of clean water under low pressure for at least 15

minutes. Consult a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If skin irritation persists, call a physician.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention immediately.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately.

Self-protection of the first aiderUse personal protective equipment. Avoid contact with eyes, skin and clothing.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

FLAMMABLE Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic

compounds. Carbon oxides. Hydrocarbons.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Avoid contact with eyes, skin and clothing. Use personal

protective equipment. Remove all sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system. Do not allow material to contaminate ground water system. Prevent

product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Remove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

Methods for cleaning up If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated

absorbent, container and unused contents in accordance with local, state and federal

regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Ensure adequate ventilation. Do not breathe vapours or spray mist. Keep away from open

flames, hot surfaces and sources of ignition. Avoid contact with eyes, skin and clothing. Take precautionary measures against static discharges. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product.

Close container after each use.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and

sources of ignition. Keep out of the reach of children.

Incompatible products Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
XYLENE 1330-20-7	TWA: 100 ppm STEL: 150 ppm	TWA: 100 ppm TWA: 435 mg/m³ STEL: 150 ppm STEL: 655 mg/m³	
ETHYL BENZENE 100-41-4	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m³ STEL: 125 ppm STEL: 545 mg/m³	800 ppm

Appropriate engineering controls

Engineering measures Sufficient ventilation, in volume and pattern, should be provided through both local and

> general exhaust to keep the air contaminant concentration below current applicable OSHA Permissible Exposure Limits (PEL) and ACGIH's Threshold Limit Values (TLV).

> Appropriate ventilation should be employed to remove hazardous decomposition products

formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Safety glasses with side-shields If splashes are likely to occur, wear face-shield. Eye/face protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, Skin and body protection

as appropriate, to prevent skin contact.

Respiratory protection Use only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

Appearance opaque Odor aromatic

No information available Color Odor threshold No information available

Remarks Property Values

рΗ No data available Melting point / freezing point No data available

Boiling point / boiling range 135 °C / 275 °F

26 °C / 78.0 °F Flash point Pensky Martens - Closed Cup

Evaporation rate No data available Flammability (solid, gas) Not applicable

Flammability Limit in Air No data available N/A

Upper flammability limit Lower flammability limit 1.0

Vapor pressure No data available

Vapor density No data available Specific gravity 0.86906 g/cm3

Water solubility

Insoluble in cold water

Solubility in other solvents No data available Partition coefficient: n-octanol/water No data available No data available **Autoignition temperature** No data available **Decomposition temperature** No data available

Kinematic viscosity Dynamic viscosity No data available

Other Information

Density 7.248 lbs/gal Volatile organic compounds (VOC) 7.248 lbs/gal

content

Total volatiles weight percent 100 % Total volatiles volume percent 100 %

10. STABILITY AND REACTIVITY

Reactivity

None under normal processing

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation Harmful if inhaled. May cause central nervous system depression with nausea, headache,

dizziness, vomiting, and incoordination. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Aspiration into lungs can produce severe

lung damage.

Eye contact Severely irritating to eyes.

Skin contact Causes mild skin irritation.

Ingestion Harmful if swallowed. Potential for aspiration if swallowed. Aspiration may cause pulmonary

edema and pneumonitis.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	
XYLENE	= 3500 mg/kg (Rat)	> 1700 mg/kg (Rabbit) > 4350	= 29.08 mg/L (Rat) 4 h = 5000	
1330-20-7		mg/kg (Rabbit)	ppm (Rat)4h	
ETHYL BENZENE 100-41-4	= 3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 17.2 mg/L (Rat)4 h	

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Eye Damage.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity NOTICE: Reports have associated repeated and prolonged occupational overexposure to

solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. May cause

cancer.

Sensitization No information available. **Mutagenicity** No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	ACGIH	IARC	NTP	OSHA
XYLENE		Group 3		
1330-20-7				
ETHYL BENZENE	A3	Group 2B		X
100-41-4		•		

Reproductive effects No information available.

STOT - single exposure Central Nervous System (CNS), Respiratory system

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure

Target organ effects blood, Central nervous system, Gastrointestinal tract, Eyes, kidney, liver, respiratory

system, Skin.

Aspiration hazard Risk of serious damage to the lungs (by aspiration).

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
XYLENE		LC50= 13.4 mg/L Pimephales	EC50 = 3.82 mg/L 48 h LC50 = 0.6
1330-20-7		promelas 96 h LC50 2.661 - 4.093	mg/L 48 h
		mg/L Oncorhynchus mykiss 96 h	
		LC50 13.5 - 17.3 mg/L	
		Oncorhynchus mykiss 96 h LC50	
		13.1 - 16.5 mg/L Lepomis	
		macrochirus 96 h LC50= 19 mg/L	
		Lepomis macrochirus 96 h LC50	
		7.711 - 9.591 mg/L Lepomis	
		macrochirus 96 h LC50 23.53 -	
		29.97 mg/L Pimephales promelas	
		96 h LC50= 780 mg/L Cyprinus	
		carpio 96 h LC50> 780 mg/L	
		Cyprinus carpio 96 h LC50 30.26 -	
ETING DENIZENE	40.701.5	40.75 mg/L Poecilia reticulata 96 h	10.01.10.10.11
ETHYL BENZENE	4.6: 72 h Pseudokirchneriella		1.8 - 2.4: 48 h Daphnia magna mg/L
100-41-4	subcapitata mg/L EC50 438: 96 h	mykiss mg/L LC50 static 32: 96 h	EC50
	Pseudokirchneriella subcapitata	Lepomis macrochirus mg/L LC50	
	mg/L EC50 2.6 - 11.3: 72 h	static 4.2: 96 h Oncorhynchus	
	Pseudokirchneriella subcapitata	mykiss mg/L LC50 semi-static 7.55 -	
	mg/L EC50 static 1.7 - 7.6: 96 h	11: 96 h Pimephales promelas mg/L	
	Pseudokirchneriella subcapitata mg/L EC50 static	LC50 flow-through 9.6: 96 h Poecilia reticulata mg/L LC50 static 9.1 -	
	mg/L LC50 static	15.6: 96 h Pimephales promelas	
		mg/L LC50 static	
		mg/L LC50 static	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
XYLENE 1330-20-7	2.77
ETHYL BENZENE 100-41-4	3.118

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal MethodsKeep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

Component	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
XYLENE		Included in waste stream:		U239
1330-20-7		F039		
ETHYL BENZENE		Included in waste stream:		
100-41-4		F039		

Component	CAWAST
XYLENE	Toxic
1330-20-7	Ignitable
ETHYL BENZENE Toxic	
100-41-4	Ignitable

14. TRANSPORT INFORMATION

DOT

UN/ID no. 1307
Proper Shipping Name XYLENE
Hazard Class 3
Packing Group III
Emergency Response Guide 130

Number

IATA

UN/ID no. 1307
Proper Shipping Name XYLENE
Hazard Class 3
Packing Group III
ERG Code 366

Additional information

Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes of Transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA Complies Complies DSL/NDSL **EINECS/ELINCS** Complies **ENCS** Complies **IECSC** Complies Complies **KECL PICCS** Complies **AICS** Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

Component HAPS Data

XYLENE

ETHYL BENZENE

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

Component	SARA 313 - Threshold Values	
XYLENE - 1330-20-7	1.0	
ETHYL BENZENE - 100-41-4	0.1	

SARA 311/312 Hazardous

Categorization

Acute Health Hazard
Chronic Health Hazard
Yes
Fire Hazard
Yes
Sudden Release of Pressure Hazard
No
Reactive Hazard
No

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
XYLENE 1330-20-7	100 lb			X
ETHYL BENZENE 100-41-4	1000 lb	X	X	Х

CERCLA

Componen	Hazardous Sub	stances RQs	CERCLA EHS RQs	RQ
XYLENE	100	lb		RQ 100 lb final RQ
1330-20-7				RQ 45.4 kg final RQ
ETHYL BENZE	NE 1000) lb		RQ 1000 lb final RQ
100-41-4				RQ 454 kg final RQ

United States of America

California Prop. 65

WARNING! This product contains a chemical known in the State of California to cause cancer

Component	California Prop. 65	
ETHYL BENZENE - 100-41-4	Carcinogen	

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
XYLENE 1330-20-7	X	X	X
ETHYL BENZENE 100-41-4	X	X	Х

16. OTHER INFORMATION

NFPA Health 2 Flammability 3 Instability 1 Physical hazard *
HMIS (Hazardous Health 2* Flammability 3 Reactivity 1

Material Information

Prepared By Revision Date Revision Summary 9 4 5 7 10 8 11 14 6 2

System)

Tnemec Regulatory Dept: 816-474-3400 12-Jul-2015

F041-0002 THINNER CLEAR

Revision Date 12-Jul-2015

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of MSDS



Safety Data Sheet

Issue Date 12-Jul-2015 Revision Date 12-Jul-2015 Revision Number 10

1. IDENTIFICATION

Product identifier

Product Code F041-0003 Product Name THINNER CLEAR

Other means of identification

Common Name NO. 3 THINNER

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1B
Specific target organ toxicity (single exposure)	Category 3
Aspiration toxicity	Category 1
Flammable Liquids	Category 3

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Causes skin irritation

Causes serious eye irritation

May cause genetic defects

May cause cancer

May cause respiratory irritation

May be fatal if swallowed and enters airways

Flammable liquid and vapor



Appearance opaque Physical state liquid Odor aromatic

Precautionary Statements

Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/mixing/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

Response

IF exposed or concerned: Get medical advice/attention

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

If skin irritation occurs: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

Toxic to aquatic life with long lasting effects

SEE SAFETY DATA SHEET

Acute Toxicity

3 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
AROMATIC HYDROCARBON MIXTURE	64742-95-6	30 - 60%
1,2,4-TRIMETHYLBENZENE	95-63-6	30 - 60%
1,3,5-TRIMETHYLBENZENE	108-67-8	1 - 10%

DIETHYLBENZENE	25340-17-4	1 - 10%
XYLENE	1330-20-7	1 - 10%
(1-METHYLETHYL)BENZENE	-	1 - 10%
ETHYL BENZENE	100-41-4	0.1 - 1%

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

eye irritation persists, consult a specialist.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If skin irritation persists, call a physician.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention immediately.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Water. Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic

compounds. Carbon oxides. Hydrocarbons.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protective equipment. Avoid contact with eyes,

skin and clothing. Remove all sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system.

Methods and material for containment and cleaning up

Remove all sources of ignition. Spills may be collected with inert, absorbent material for **Methods for containment**

> proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

Methods for cleaning up If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated

absorbent, container and unused contents in accordance with local, state and federal

regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Wear personal

protective equipment. Avoid contact with eyes, skin and clothing. Remove and wash contaminated clothing before re-use. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Do not breathe vapours or spray mist. Do not ingest. Ensure adequate ventilation. Do not eat, drink or

smoke when using this product. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of **Storage**

children.

Strong oxidizing agents. Acids. Alkalis. Incompatible products

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
XYLENE	TWA: 100 ppm	TWA: 100 ppm	
1330-20-7	STEL: 150 ppm	TWA: 435 mg/m ³ STEL: 150 ppm	
		STEL: 655 mg/m ³	
		5 · · · · · · · · · · · · · · · · ·	
(1-METHYLETHYL)BENZENE	TWA: 50 ppm	TWA: 50 ppm TWA: 245 mg/m³ Skin	900 ppm
		OKIT	
ETHYL BENZENE 100-41-4	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m³ STEL: 125 ppm STEL: 545 mg/m³	800 ppm

Appropriate engineering controls

Engineering measures Sufficient ventilation, in volume and pattern, should be provided through both local and

general exhaust to keep the air contaminant concentration below current applicable OSHA Permissible Exposure Limits (PEL) and ACGIH"s Threshold Limit Values (TLV).

Appropriate ventilation should be employed to remove hazardous decomposition products

formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Use chemical resistant splash type goggles.

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, Skin and body protection

as appropriate, to prevent skin contact.

Respiratory protection Use only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

Handle in accordance with good industrial hygiene and safety practice. General hygiene considerations

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

Appearance opaque aromatic Odor

Color No information available Odor threshold No information available

Remarks Values Property

No data available Hq Melting point / freezing point

No data available

72 °C / 162 °F Boiling point / boiling range

42 °C / 108 °F Pensky Martens - Closed Cup Flash point

No data available **Evaporation rate** Flammability (solid, gas) Not applicable Flammability Limit in Air No data available

Upper flammability limit N/A Lower flammability limit 1.0

No data available Vapor pressure Vapor density No data available

Specific gravity 0.87179 g/cm3

Water solubility Insoluble in cold water

Solubility in other solvents No data available Partition coefficient: n-octanol/water No data available **Autoignition temperature** No data available **Decomposition temperature** No data available No data available Kinematic viscosity

Dynamic viscosity No data available

Other Information

Density 7.27077 lbs/gal Volatile organic compounds (VOC) 7.27077 lbs/gal

content

Total volatiles weight percent 100 % Total volatiles volume percent 100 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents, Acids, Alkalis

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination. Aspiration into lungs can produce severe lung damage.

Eye contact Causes serious eye damage.

Skin contact Irritating to skin.

Ingestion Harmful if swallowed. Potential for aspiration if swallowed. Aspiration may cause pulmonary

edema and pneumonitis.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
AROMATIC HYDROCARBON MIXTURE 64742-95-6	= 8400 mg/kg(Rat)	> 2000 mg/kg (Rabbit)	= 3400 ppm (Rat) 4 h
1,2,4-TRIMETHYLBENZENE 95-63-6	= 3280 mg/kg(Rat)	> 3160 mg/kg (Rabbit)	= 18 g/m³(Rat)4 h
1,3,5-TRIMETHYLBENZENE 108-67-8	= 5000 mg/kg(Rat)		= 24 g/m³(Rat)4 h
XYLENE 1330-20-7	= 3500 mg/kg(Rat)	> 1700 mg/kg (Rabbit) > 4350 mg/kg (Rabbit)	= 29.08 mg/L (Rat) 4 h = 5000 ppm (Rat) 4 h
(1-METHYLETHYL)BENZENE	= 1400 mg/kg(Rat)	= 12300 μL/kg(Rabbit)	> 3577 ppm (Rat) 6 h = 39000 mg/m³ (Rat) 4 h
ETHYL BENZENE 100-41-4	= 3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 17.2 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Eye Damage.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity NOTICE: Reports have associated repeated and prolonged occupational overexposure to

solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. May cause

cancer.

Sensitization MutagenicityNo information available.
May cause genetic defects.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

ourcinogernoity	THE LADIC DE	The table below indicates whether each agency has listed any ingredient as a careinogen.		
Component	ACGIH	IARC	NTP	OSHA
XYLENE		Group 3		
1330-20-7				
(1-METHYLETHYL)BENZE NE		Group 2B	Reasonably Anticipated	X
ETHYL BENZENE	А3	Group 2B		X

Reproductive effects No information available.

STOT - single exposure Skin, Eyes, Central Nervous System (CNS)

STOT - repeated exposureNo information available

Aspiration hazard Risk of serious damage to the lungs (by aspiration).

Acute Toxicity 3 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

36 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
AROMATIC HYDROCARBON MIXTURE 64742-95-6		9.22: 96 h Oncorhynchus mykiss mg/L LC50	6.14: 48 h Daphnia magna mg/L EC50
1,2,4-TRIMETHYLBENZENE 95-63-6		7.19 - 8.28: 96 h Pimephales promelas mg/L LC50 flow-through	6.14: 48 h Daphnia magna mg/L EC50
1,3,5-TRIMETHYLBENZENE 108-67-8		3.48: 96 h Pimephales promelas mg/L LC50	50: 24 h Daphnia magna mg/L EC50
XYLENE 1330-20-7		LC50= 13.4 mg/L Pimephales promelas 96 h LC50 2.661 - 4.093 mg/L Oncorhynchus mykiss 96 h LC50 13.5 - 17.3 mg/L Oncorhynchus mykiss 96 h LC50 13.1 - 16.5 mg/L Lepomis macrochirus 96 h LC50= 19 mg/L Lepomis macrochirus 96 h LC50 7.711 - 9.591 mg/L Lepomis macrochirus 96 h LC50 23.53 - 29.97 mg/L Pimephales promelas 96 h LC50= 780 mg/L Cyprinus carpio 96 h LC50> 780 mg/L Cyprinus carpio 96 h LC50> 30.26 - 40.75 mg/L Poecilia reticulata 96 h	EC50 = 3.82 mg/L 48 h LC50 = 0.6 mg/L 48 h
(1-METHYLETHYL)BENZENE	2.6: 72 h Pseudokirchneriella subcapitata mg/L EC50	2.7: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 6.04 - 6.61: 96 h Pimephales promelas mg/L LC50 flow-through 4.8: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 5.1: 96 h Poecilia reticulata mg/L LC50 semi-static	0.6: 48 h Daphnia magna mg/L EC50 7.9 - 14.1: 48 h Daphnia magna mg/L EC50 Static
ETHYL BENZENE 100-41-4	4.6: 72 h Pseudokirchneriella subcapitata mg/L EC50 438: 96 h Pseudokirchneriella subcapitata mg/L EC50 2.6 - 11.3: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 1.7 - 7.6: 96 h Pseudokirchneriella subcapitata mg/L EC50 static	11.0 - 18.0: 96 h Oncorhynchus mykiss mg/L LC50 static 32: 96 h Lepomis macrochirus mg/L LC50 static 4.2: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 7.55 - 11: 96 h Pimephales promelas mg/L LC50 flow-through 9.6: 96 h Poecilia reticulata mg/L LC50 static 9.1 - 15.6: 96 h Pimephales promelas mg/L LC50 static	1.8 - 2.4: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
1,2,4-TRIMETHYLBENZENE 95-63-6	3.63
XYLENE 1330-20-7	2.77
(1-METHYLETHYL)BENZENE	3.55

ETHYL BENZENE	3.118
100-41-4	

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

Component	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
XYLENE		Included in waste stream:		U239
1330-20-7		F039		
(1-METHYLETHYL)BENZE				U055
NE				
ETHYL BENZENE		Included in waste stream:		
100-41-4		F039		

Component	CAWAST	
XYLENE	Toxic	
1330-20-7	Ignitable	
(1-METHYLETHYL)BENZENE	Toxic Ignitable	
ETHYL BENZENE	Toxic	
100-41-4	Ignitable	

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name PAINT & RELATED MATERIAL-(NMFC 149980 SUB 2)

<u>IATA</u>

UN/ID no. 1993

Proper Shipping Name Flammable liquid, n.o.s (trimethyl benzene)

Hazard Class 3
Packing Group III
ERG Code 366

Additional information Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

Complies **TSCA DSL/NDSL** Complies Complies **EINECS/ELINCS** Complies **ENCS IECSC** Complies **KECL** Complies Complies **PICCS** Complies **AICS**

-

F041-0003 THINNER CLEAR

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

Component HAPS Data

XYLENE

(1-METHYLETHYL)BENZENE

ETHYL BENZENE

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

Component	SARA 313 - Threshold Values
1,2,4-TRIMETHYLBENZENE - 95-63-6	1.0
XYLENE - 1330-20-7	1.0
(1-METHYLETHYL)BENZENE -	1.0
ETHYL BENZENE - 100-41-4	0.1

SARA 311/312 Hazardous

Categorization

Acute Health Hazard Yes
Chronic Health Hazard Yes
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
XYLENE 1330-20-7	100 lb			X
ETHYL BENZENE 100-41-4	1000 lb	Х	X	X

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs	RQ
XYLENE 1330-20-7	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ
(1-METHYLETHYL)BENZENE	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
ETHYL BENZENE 100-41-4	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

United States of America

California Prop. 65

WARNING! This product contains a chemical known in the State of California to cause cancer

Component	California Prop. 65	
(1-METHYLETHYL)BENZENE -	Carcinogen	
ETHYL BENZENE - 100-41-4	Carcinogen	

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
1,2,4-TRIMETHYLBENZENE 95-63-6	X	Х	X
1,3,5-TRIMETHYLBENZENE 108-67-8		X	
DIETHYLBENZENE 25340-17-4	X		
XYLENE 1330-20-7	X	X	X
(1-METHYLETHYL)BENZENE	X	X	Х
ETHYL BENZENE 100-41-4	Х	Х	Х

16. OTHER INFORMATION

<u>NFPA</u> Health 2 Flammability 2 Instability 1 Physical hazard * Health 2* Flammability 2 Reactivity 1

Material Information

System)

Prepared By Tnemec Regulatory Dept: 816-474-3400

Revision Date 12-Jul-2015

Revision Summary 9 4 5 7 10 8 11 14 6

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of MSDS



Safety Data Sheet

Issue Date 12-Jul-2015 Revision Date 12-Jul-2015 Revision Number 12

1. IDENTIFICATION

Product identifier

Product Code F041-0004
Product Name THINNER CLEAR

Other means of identification

Common Name NO. 4 THINNER

UN/ID no. 1263

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised againstConsumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Flammable Liquids	Category 2

Label elements

EMERGENCY OVERVIEW

Danger			

Hazard statements

Harmful if swallowed

Harmful if inhaled

Causes skin irritation

Causes serious eye damage

Suspected of causing cancer

May cause respiratory irritation

May cause damage to organs through prolonged or repeated exposure

May be fatal if swallowed and enters airways

Highly flammable liquid and vapor



Appearance clear Physical state liquid Odor aromatic

Precautionary Statements

Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/mixing/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

Response

IF exposed or concerned: Get medical advice/attention

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

If skin irritation occurs: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Rinse mouth

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

Toxic to aquatic life with long lasting effects

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
METHYL ISOBUTYL KETONE	108-10-1	30 - 60%
XYLENE	1330-20-7	30 - 60%
N-BUTANOL (SKIN)	71-36-3	10 - 30%
ETHYL BENZENE	100-41-4	1 - 10%

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

F041-0004 THINNER CLEAR

General advice If symptoms persist, call a physician.

Eve contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call

a physician immediately.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If skin irritation persists, call a physician.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention immediately.

If swallowed, do not induce vomiting. Get medical attention immediately. Never give Ingestion

anything by mouth to an unconscious person.

Self-protection of the first aider Use personal protective equipment. Avoid contact with eyes, skin and clothing.

Most important symptoms and effects, both acute and delayed

Most important symptoms and

effects

Breathing difficulties.

Aspiration hazard. Notes to physician

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

FLAMMABLE Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic

compounds. Carbon oxides. Hydrocarbons.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Avoid contact with eyes, skin and clothing. Use personal

protective equipment. Remove all sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system. Do not allow material to contaminate ground water system. Prevent

product from entering drains.

Methods and material for containment and cleaning up

Methods for containmentRemove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

Methods for cleaning up If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated

absorbent, container and unused contents in accordance with local, state and federal

regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Ensure adequate ventilation. Do not breathe vapours or spray mist. Keep away from open

flames, hot surfaces and sources of ignition. Avoid contact with eyes, skin and clothing. Take precautionary measures against static discharges. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product.

Close container after each use.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and

sources of ignition. Keep out of the reach of children.

Incompatible products Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
METHYL ISOBUTYL KETONE 108-10-1	TWA: 20 ppm STEL: 75 ppm	TWA: 50 ppm TWA: 205 mg/m³ STEL: 75 ppm STEL: 300 mg/m³ TWA: 100 ppm TWA: 410 mg/m³	500 ppm
XYLENE 1330-20-7	TWA: 100 ppm STEL: 150 ppm	TWA: 100 ppm TWA: 435 mg/m³ STEL: 150 ppm STEL: 655 mg/m³	
N-BUTANOL (SKIN) 71-36-3	TWA: 20 ppm	Skin Ceiling: 50 ppm Ceiling: 150 mg/m³ TWA: 100 ppm TWA: 300 mg/m³	1400 ppm

ETHYL BENZENE 100-41-4	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m³ STEL: 125 ppm STEL: 545 mg/m³	800 ppm
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Appropriate engineering controls

Sufficient ventilation, in volume and pattern, should be provided through both local and **Engineering measures**

general exhaust to keep the air contaminant concentration below current applicable OSHA

Permissible Exposure Limits (PEL) and ACGIH's Threshold Limit Values (TLV).

Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Use chemical resistant splash type goggles. If splashes are likely to occur, wear

face-shield.

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, Skin and body protection

as appropriate, to prevent skin contact.

Respiratory protection Use only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

Handle in accordance with good industrial hygiene and safety practice. **General hygiene considerations**

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state

Appearance clear Odor aromatic

Color No information available Odor threshold No information available

Remarks Property Values

No data available No data available

Melting point / freezing point 114 °C / 237 °F Boiling point / boiling range

Flash point 18 °C / 64 °F Pensky Martens - Closed Cup

Evaporation rate No data available Flammability (solid, gas) Not applicable

Flammability Limit in Air No data available Upper flammability limit N/A

Lower flammability limit 1.0

Vapor pressure No data available

Vapor density No data available

Specific gravity 0.8294 a/cm3 Water solubility Insoluble in cold water

Solubility in other solvents No data available Partition coefficient: n-octanol/water No data available

Autoignition temperature No data available No data available **Decomposition temperature** Kinematic viscosity No data available No data available **Dynamic viscosity**

Other Information

6.9172 lbs/gal Density

Volatile organic compounds (VOC) 6.9172 lbs/gal

content

Total volatiles weight percent 100 % Total volatiles volume percent 100 %

10. STABILITY AND REACTIVITY

Reactivity

None under normal processing

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation Harmful if inhaled. May cause central nervous system depression with nausea, headache,

dizziness, vomiting, and incoordination. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Aspiration into lungs can produce severe

lung damage.

Eye contact Causes serious eye damage.

Skin contact Irritating to skin.

Ingestion Harmful if swallowed. Potential for aspiration if swallowed. Aspiration may cause pulmonary

edema and pneumonitis.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
METHYL ISOBUTYL KETONE 108-10-1	= 2080 mg/kg(Rat)	= 3000 mg/kg(Rabbit)	= 8.2 mg/L (Rat)4 h
XYLENE 1330-20-7	= 3500 mg/kg (Rat)	> 1700 mg/kg(Rabbit)> 4350 mg/kg(Rabbit)	= 29.08 mg/L (Rat) 4 h = 5000 ppm (Rat) 4 h
N-BUTANOL (SKIN) 71-36-3	= 700 mg/kg (Rat) = 790 mg/kg (Rat)	= 3402 mg/kg(Rabbit)= 3400 mg/kg(Rabbit)	> 8000 ppm (Rat) 4 h
ETHYL BENZENE 100-41-4	= 3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 17.2 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Eye Damage.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Corrosivity Corrosive to the eyes and may cause severe damage including blindness.

Chronic Toxicity NOTICE: Reports have associated repeated and prolonged occupational overexposure to

solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. May cause

cancer.

Sensitization No information available. **Mutagenicity** No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	ACGIH	IARC	NTP	OSHA
METHYL ISOBUTYL KETONE 108-10-1	А3	Group 2B		Х
XYLENE 1330-20-7		Group 3		
ETHYL BENZENE 100-41-4	A3	Group 2B		Х

Reproductive effects

No information available.

STOT - single exposure

Central Nervous System (CNS), Respiratory system

STOT - repeated exposure

Causes damage to organs through prolonged or repeated exposure

Target organ effects blood, Cer

blood, Central nervous system, Gastrointestinal tract, Eyes, kidney, liver, respiratory

system, Skin.

Aspiration hazard

Risk of serious damage to the lungs (by aspiration).

Acute Toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
METHYL ISOBUTYL KETONE	400: 96 h Pseudokirchneriella	496 - 514: 96 h Pimephales	170: 48 h Daphnia magna mg/L
108-10-1	subcapitata mg/L EC50	promelas mg/L LC50 flow-through	EC50
XYLENE		LC50= 13.4 mg/L Pimephales	EC50 = 3.82 mg/L 48 h LC50 = 0.6
1330-20-7		promelas 96 h LC50 2.661 - 4.093	mg/L 48 h
		mg/L Oncorhynchus mykiss 96 h	
		LC50 13.5 - 17.3 mg/L	
		Oncorhynchus mykiss 96 h LC50	
		13.1 - 16.5 mg/L Lepomis	
		macrochirus 96 h LC50= 19 mg/L	
		Lepomis macrochirus 96 h LC50	
		7.711 - 9.591 mg/L Lepomis	
		macrochirus 96 h LC50 23.53 -	
		29.97 mg/L Pimephales promelas	
		96 h LC50= 780 mg/L Cyprinus	
		carpio 96 h LC50> 780 mg/L	
		Cyprinus carpio 96 h LC50 30.26 -	
N. D. ITANIAL (OLCU)		40.75 mg/L Poecilia reticulata 96 h	100-00-01-01-01-01-01-01-01-01-01-01-01-
N-BUTANOL (SKIN)	500: 96 h Desmodesmus	1740: 96 h Pimephales promelas	1897 - 2072: 48 h Daphnia magna
71-36-3	subspicatus mg/L EC50 500: 72 h	mg/L LC50 flow-through 1910000:	mg/L EC50 Static 1983: 48 h
	Desmodesmus subspicatus mg/L	96 h Pimephales promelas µg/L	Daphnia magna mg/L EC50
	EC50	LC50 static 100000 - 500000: 96 h	
		Lepomis macrochirus µg/L LC50	
		static 1730 - 1910: 96 h Pimephales promelas mg/L LC50 static	
ETINA DENIZENE	4.0. 70 b December Subscriber	·	4.0. 0.4. 40 h Danha'a wasan wa w
ETHYL BENZENE	4.6: 72 h Pseudokirchneriella	11.0 - 18.0: 96 h Oncorhynchus	1.8 - 2.4: 48 h Daphnia magna mg/L
100-41-4	subcapitata mg/L EC50 438: 96 h	mykiss mg/L LC50 static 32: 96 h Lepomis macrochirus mg/L LC50	EC50
	Pseudokirchneriella subcapitata mg/L EC50 2.6 - 11.3: 72 h	static 4.2: 96 h Oncorhynchus	
	Pseudokirchneriella subcapitata	mykiss mg/L LC50 semi-static 7.55 -	
	mg/L EC50 static 1.7 - 7.6: 96 h	11: 96 h Pimephales promelas mg/L	
	Pseudokirchneriella subcapitata	LC50 flow-through 9.6: 96 h Poecilia	
	mg/L EC50 static	reticulata mg/L LC50 static 9.1 -	
	111g/2 2000 Static	15.6: 96 h Pimephales promelas	
		mg/L LC50 static	
	l .	Ing/L Lood statio	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
METHYL ISOBUTYL KETONE 108-10-1	1.19
XYLENE 1330-20-7	2.77
N-BUTANOL (SKIN) 71-36-3	0.785
ETHYL BENZENE 100-41-4	3.118

Other Adverse Effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal MethodsKeep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

Component	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
METHYL ISOBUTYL		Included in waste stream:		U161
KETONE		F039		
108-10-1				
XYLENE		Included in waste stream:		U239
1330-20-7		F039		
N-BUTANOL (SKIN)		Included in waste stream:		U031
71-36-3		F039		
ETHYL BENZENE		Included in waste stream:		
100-41-4		F039		

Component	CAWAST
XYLENE	Toxic
1330-20-7	Ignitable
N-BUTANOL (SKIN) 71-36-3	Toxic
ETHYL BENZENE	Toxic
100-41-4	Ignitable

14. TRANSPORT INFORMATION

DOT

UN/ID no. 1263

Proper Shipping Name Paint related material

Hazard Class 3
Packing Group II
Emergency Response Guide 128

Number

<u>IATA</u>

<u>INTA</u>

UN/ID no. 1263

Proper Shipping Name Paint related material

Hazard Class 3
Packing Group II
ERG Code 364

Additional information Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

Complies **TSCA DSL/NDSL** Complies Complies **EINECS/ELINCS** Complies **ENCS** Complies **IECSC KECL** Complies Complies **PICCS** Complies **AICS**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

Component HAPS Data

METHYL ISOBUTYL KETONE

XYLENE

ETHYL BENZENE

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

Component	SARA 313 - Threshold Values
METHYL ISOBUTYL KETONE - 108-10-1	1.0
XYLENE - 1330-20-7	1.0
N-BUTANOL (SKIN) - 71-36-3	1.0
ETHYL BENZENE - 100-41-4	0.1

SARA 311/312 Hazardous

Categorization

Acute Health Hazard Yes
Chronic Health Hazard Yes
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

Clean Water Act

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
XYLENE	100 lb			X
1330-20-7				

ETHYL BENZENE	1000 lb	X	X	X
100-41-4				

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs	RQ
METHYL ISOBUTYL KETONE 108-10-1	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
XYLENE 1330-20-7	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ
N-BUTANOL (SKIN)	5000 lb		RQ 5000 lb final RQ
71-36-3 ETHYL BENZENE	1000 lb		RQ 2270 kg final RQ RQ 1000 lb final RQ
100-41-4			RQ 454 kg final RQ

United States of America

California Prop. 65

WARNING! This product contains a chemical known in the State of California to cause cancer

Component	California Prop. 65
METHYL ISOBUTYL KETONE - 108-10-1	Carcinogen
	Developmental
ETHYL BENZENE - 100-41-4	Carcinogen

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
METHYL ISOBUTYL KETONE	X	X	X
108-10-1			
XYLENE	X	X	X
1330-20-7			
N-BUTANOL (SKIN)	X	X	X
71-36-3			
ETHYL BENZENE	X	X	X
100-41-4			

16. OTHER INFORMATION

NFPA Health 2 Flammability 3 Instability 1 Physical hazard *
HMIS (Hazardous Health 2* Flammability 3 Reactivity 1

Material Information

System)

Prepared By Tnemec Regulatory Dept: 816-474-3400

Revision Date 12-Jul-2015

Revision Summary 9 4 5 7 10 8 11 14 6 15

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of MSDS

TNEMEC

Safety Data Sheet

Issue Date 16-Jul-2015 Revision Date 16-Jul-2015 Revision Number 10

1. IDENTIFICATION

Product identifier

Product Code F041-0015 Product Name THINNER CLEAR

Other means of identification

Common Name NO. 15 THINNER

UN/ID no. 1170

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2B
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 2
Flammable Liquids	Category 2

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Harmful if swallowed

Causes skin irritation

Causes eve irritation

May cause genetic defects

May cause cancer

May cause damage to organs

Highly flammable liquid and vapor



Appearance opaque Physical state liquid Odor aromatic

Precautionary Statements

Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not breathe dust/fume/gas/mist/vapors/spray

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/mixing/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Response

IF exposed or concerned: Get medical advice/attention

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

If skin irritation occurs: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store locked up

Store in a well-ventilated place. Keep cool

Keep away from children

Disposa

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

Toxic to aquatic life with long lasting effects

Inhalation, ingestion, or skin absorption of methanol can cause blindness

SEE SAFETY DATA SHEET

Acute Toxicity 0.0983 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
ETHYL ALCOHOL	-	60 - 100%
METHYL ALCOHOL	-	1 - 10%
ACETIC ACID ETHYL ESTER	-	1 - 10%
METHYL ISOBUTYL KETONE	108-10-1	1 - 10%

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

eye irritation persists, consult a specialist.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If skin irritation persists, call a physician.

Inhalation Remove to fresh air. Oxygen or artificial respiration if needed.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Water.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic

compounds. Carbon oxides. Hydrocarbons.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all

sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containmentRemove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

absorbent, container and unused contents in accordance with local, state and federal

regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Close container after each use. Avoid contact with eyes, skin and clothing. Do not eat, drink

or smoke when using this product. If splashes are likely to occur, wear goggles. Wear protective gloves/clothing. Do not burn, or use a cutting torch on, the empty drum. When used in a mixture, read the labels and safety data sheets of all components. Wash

thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of

children.

Incompatible products Strong oxidizing agents. Acids. Alkaline. Amines.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
ETHYL ALCOHOL	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³	3300 ppm
METHYL ALCOHOL	TWA: 200 ppm Skin STEL: 250 ppm	TWA: 200 ppm TWA: 260 mg/m³ STEL: 250 ppm STEL: 325 mg/m³ Skin	6000 ppm
ACETIC ACID ETHYL ESTER	TWA: 400 ppm	TWA: 400 ppm TWA: 1400 mg/m ³	2000 ppm
METHYL ISOBUTYL KETONE 108-10-1	TWA: 20 ppm STEL: 75 ppm	TWA: 50 ppm TWA: 205 mg/m³ STEL: 75 ppm STEL: 300 mg/m³ TWA: 100 ppm TWA: 410 mg/m³	500 ppm

Appropriate engineering controls

Engineering measures Sufficient ventilation, in volume and pattern, should be provided through both local and

general exhaust to keep the air contaminant concentration below current applicable OSHA

Permissible Exposure Limits (PEL) and ACGIH"s Threshold Limit Values (TLV).

Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Use chemical resistant splash type goggles.

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, Skin and body protection

as appropriate, to prevent skin contact.

Respiratory protection Use only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

Handle in accordance with good industrial hygiene and safety practice. General hygiene considerations

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

Appearance opaque aromatic Odor

Color No information available Odor threshold No information available

Remarks Values Property

No data available Hq Melting point / freezing point

No data available

116 °C / 241.0 °F Boiling point / boiling range

7 °C / 45 °F Pensky Martens - Closed Cup Flash point

No data available **Evaporation rate** Flammability (solid, gas) Not applicable Flammability Limit in Air No data available

Upper flammability limit N/A Lower flammability limit 1.0

No data available Vapor pressure Vapor density No data available

Specific gravity .79377 g/cm3

Water solubility Insoluble in cold water

Solubility in other solvents No data available Partition coefficient: n-octanol/water No data available **Autoignition temperature** No data available **Decomposition temperature** No data available No data available

Kinematic viscosity **Dynamic viscosity**

No data available

Other Information

Density 6.60533 lbs/gal Volatile organic compounds (VOC) 6.599 lbs/gal

content

Total volatiles weight percent 100.0000 % Total volatiles volume percent 100.0000 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents, Acids, Alkaline, Amines

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation Aspiration into lungs can produce severe lung damage.

Eye contact Causes serious eye irritation.

Skin contact CAUSES SKIN IRRITATION.

Ingestion Harmful if swallowed. Potential for aspiration if swallowed. Aspiration may cause pulmonary

edema and pneumonitis.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
ETHYL ALCOHOL	= 7060 mg/kg (Rat)		= 124.7 mg/L (Rat) 4 h
METHYL ALCOHOL	= 6200 mg/kg (Rat)	= 15800 mg/kg (Rabbit)	= 22500 ppm (Rat) 8 h = 64000 ppm (Rat) 4 h
ACETIC ACID ETHYL ESTER	= 5620 mg/kg (Rat)	> 18000 mg/kg (Rabbit) > 20 mL/kg (Rabbit)	
METHYL ISOBUTYL KETONE 108-10-1	= 2080 mg/kg (Rat)	= 3000 mg/kg (Rabbit)	= 8.2 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Irritating to eyes and skin.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity May cause cancer. Substances known to be mutagenic to man.

SensitizationNo information available.MutagenicityMay cause genetic defects.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Carcinogenicity	THE TABLE BEI	The table below indicates whether each agency has listed any ingre		realent as a careningen.
Component	ACGIH	IARC	NTP	OSHA
ETHYL ALCOHOL	A3	Group 1	Known	Х
METHYL ISOBUTYL KETONE 108-10-1	А3	Group 2B		Х

Reproductive effects
STOT - single exposure
No information available.
No information available

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure

Target organ effects blood, Central nervous system, Gastrointestinal tract, Eyes, liver, Reproductive System,

respiratory system, kidney, Skin.

Aspiration hazard Risk of serious damage to the lungs (by aspiration).

Acute Toxicity 0.0983 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

0.0983 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
ETHYL ALCOHOL		100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static	9268 - 14221: 48 h Daphnia magna mg/L LC50 10800: 24 h Daphnia magna mg/L EC50 2: 48 h Daphnia magna mg/L EC50 Static
METHYL ALCOHOL		28200: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static 19500 - 20700: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 18 - 20: 96 h Oncorhynchus mykiss mL/L LC50 static 13500 - 17600: 96 h Lepomis macrochirus mg/L LC50 flow-through	
ACETIC ACID ETHYL ESTER	3300: 48 h Desmodesmus subspicatus mg/L EC50	352 - 500: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 220 - 250: 96 h Pimephales promelas mg/L LC50 flow-through 484: 96 h Oncorhynchus mykiss mg/L LC50 flow-through	560: 48 h Daphnia magna mg/L EC50 Static
METHYL ISOBUTYL KETONE 108-10-1	400: 96 h Pseudokirchneriella subcapitata mg/L EC50	496 - 514: 96 h Pimephales promelas mg/L LC50 flow-through	170: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
ETHYL ALCOHOL	-0.32
METHYL ALCOHOL	-0.77
ACETIC ACID ETHYL ESTER	0.6
METHYL ISOBUTYL KETONE 108-10-1	1.19

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

Component	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
METHYL ALCOHOL		Included in waste stream: F039		U154
ACETIC ACID ETHYL ESTER		Included in waste stream: F039		U112

METHYL ISOBUTYL KETONE	Ir	ncluded in waste stream: F039	U161
108-10-1			

Component	CAWAST
ETHYL ALCOHOL	Toxic Ignitable
METHYL ALCOHOL	Toxic Ignitable
ACETIC ACID ETHYL ESTER	Toxic Ignitable

14. TRANSPORT INFORMATION

DOT

UN/ID no. 1170

Proper Shipping Name ETHYL ALCOHOL

Hazard Class 3
Packing Group || |
Emergency Response Guide 127

Number

IATA

UN/ID no. 1170

Proper Shipping Name ETHYL ALCOHOL

Hazard Class 3
Packing Group II
ERG Code 364

Additional information Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA Complies DSL/NDSL Complies Complies **EINECS/ELINCS** Complies **ENCS** Complies **IECSC** Complies **KECL** Complies **PICCS** Complies **AICS**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

Component HAPS Data

METHYL ALCOHOL

METHYL ISOBUTYL KETONE

United States of America

F041-0015 THINNER CLEAR

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

Component	SARA 313 - Threshold Values
METHYL ALCOHOL -	1.0
METHYL ISOBUTYL KETONE - 108-10-1	1.0

SARA 311/312 Hazardous

Categorization

Acute Health Hazard Yes
Chronic Health Hazard Yes
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs	RQ
METHYL ALCOHOL	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
ACETIC ACID ETHYL ESTER	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
METHYL ISOBUTYL KETONE 108-10-1	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

United States of America

California Prop. 65

WARNING! This product contains a chemical known in the State of California to cause cancer

Component	California Prop. 65
	California Frop. 63
ETHYL ALCOHOL -	Carcinogen
	Developmental
METHYL ALCOHOL -	Developmental
METHYL ISOBUTYL KETONE - 108-10-1	Carcinogen
	Developmental

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
ETHYL ALCOHOL	Х	X	Х
METHYL ALCOHOL	X	X	Х
ACETIC ACID ETHYL ESTER	Х	X	Х
METHYL ISOBUTYL KETONE 108-10-1	X	X	Х

16. OTHER INFORMATION

NFPA Health 2 Flammability 3 Instability 1 Physical hazard *
HMIS (Hazardous Health 2* Flammability 3 Reactivity 1

Material Information

System)

Prepared By Revision Date Revision Summary Tnemec Regulatory Dept: 816-474-3400

16-Jul-2015

9 4 5 7 10 8 11 14

F041-0015 THINNER CLEAR

Revision Date 16-Jul-2015

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of MSDS



Safety Data Sheet

Issue Date 16-Jul-2015 Revision Date 16-Jul-2015 Revision Number 7

1. IDENTIFICATION

Product identifier

Product Code F041-0018
Product Name THINNER CLEAR

Other means of identification

Common Name NO. 18 THINNER

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Inhalation (Vapors)	Category 5
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3
Flammable Liquids	Category 3

Label elements

EMERGENCY OVERVIEW

WARNING

Hazard statements

May be harmful if inhaled Causes serious eye irritation

May cause respiratory irritation. May cause drowsiness or dizziness

Flammable liquid and vapor



Appearance opaque Physical state liquid Odor aromatic

Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/mixing/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

Response

Get medical advice/attention if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Keep away from children

Disposa

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

SEE SAFETY DATA SHEET

Acute Toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE	108-65-6	60 - 100%

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

symptoms persist, call a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If skin irritation persists, call a physician.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention immediately.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic

compounds. Carbon oxides. Hydrocarbons.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protective equipment. Avoid contact with eyes,

skin and clothing. Remove all sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containmentRemove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

Methods for cleaning up If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated

absorbent, container and unused contents in accordance with local, state and federal

regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Wear personal

protective equipment. Avoid contact with eyes, skin and clothing. Remove and wash contaminated clothing before re-use. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Do not breathe vapours or spray mist. Do not ingest. Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of

children.

Incompatible products Strong oxidizing agents. Acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Appropriate engineering controls

Engineering measures Sufficient ventilation, in volume and pattern, should be provided through both local and

general exhaust to keep the air contaminant concentration below current applicable OSHA

Permissible Exposure Limits (PEL) and ACGIH"s Threshold Limit Values (TLV).

Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Safety glasses with side-shields Use chemical resistant splash type goggles. If splashes

are likely to occur, wear face-shield.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

Respiratory protectionUse only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

AppearanceOpaqueOdoraromatic

Color No information available Odor threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks</u>

oH No data available

Melting point / freezing point No data available

Melting point / freezing point No data availab Boiling point / boiling range 139 °C / 283 °F

Flash point 47 °C / 116 °F Pensky Martens - Closed Cup

Evaporation rateNo data availableFlammability (solid, gas)Not applicableFlammability Limit in AirNo data available

Upper flammability limit N/A Lower flammability limit 1.0

Vapor pressureNo data availableVapor densityNo data available

Specific gravity 0.96283 g/cm3

Water solubility Insoluble in cold water

Solubility in other solventsNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableKinematic viscosityNo data availableDynamic viscosityNo data available

Other Information

Density 8.03 lbs/gal **Volatile organic compounds (VOC)** 8.03 lbs/gal

content

Total volatiles weight percent 100 % Total volatiles volume percent 100 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents, Acids

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact Causes serious eye irritation.

Skin contact CAUSES SKIN IRRITATION.

Ingestion Harmful if swallowed.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE 108-65-6	= 8532 mg/kg (Rat)	> 5 g/kg(Rabbit)	

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Irritating to eyes and skin.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity NOTICE: Reports have associated repeated and prolonged occupational overexposure to

solvents with permanent brain and nervous system damage. Intentional misuse by

deliberately concentrating and inhaling the contents may be harmful or fatal.

Sensitization No information available.

Mutagenicity No information available.

Carcinogenicity There are no known carcinogenic chemicals in this product.

Reproductive effects
STOT - single exposure
STOT - repeated exposure
Aspiration hazard
No information available.
Skin, Eyes, Respiratory system
No information available
No information available.

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
PROPYLENE GLYCOL		161: 96 h Pimephales promelas	500: 48 h Daphnia magna mg/L
MONOMETHYL ETHER ACETATE		mg/L LC50 static	EC50
108-65-6			

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE	0.43
108-65-6	

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Paint related material

IATA

UN/ID no. 1193

Proper Shipping Name Flammable liquid n.o.s (P. M. Acetate)

Hazard Class 3
Packing Group III
ERG Code 366

Additional information Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA Complies Complies **DSL/NDSL EINECS/ELINCS** Complies Complies **ENCS** Complies **IECSC** Complies **KECL PICCS** Complies **AICS** Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous

Categorization

Acute Health HazardYesChronic Health HazardNoFire HazardYesSudden Release of Pressure HazardNoReactive HazardNo

CERCLA

United States of America

California Prop. 65

This product does not contain any Proposition 65 chemicals

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

16. OTHER INFORMATION

NFPA Health 2 Flammability 2 Instability 0 Physical hazard *
HMIS (Hazardous Health 2 Flammability 2 Reactivity 0

Material Information

System)

Prepared By Tnemec Regulatory Dept: 816-474-3400

Revision Date 16-Jul-2015

Revision Summary 9 4 5 7 10 8 11 14 6 15

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of MSDS



Safety Data Sheet

Issue Date 16-Jul-2015 Revision Date 16-Jul-2015 Revision Number 8

1. IDENTIFICATION

Product identifier

Product Code F041-0019
Product Name THINNER CLEAR

Other means of identification

Common Name NO. 19 THINNER

UN/ID no. 1263

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Carcinogenicity	Category 2
Reproductive Toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Flammable Liquids	Category 2

Label elements

EMERGENCY OVERVIEW

EWERGENCY OVERVIEW			
Danger			

Hazard statements

Harmful if swallowed

Harmful if inhaled

Causes skin irritation

Causes serious eye irritation

Suspected of causing cancer

Suspected of damaging fertility or the unborn child

May cause respiratory irritation. May cause drowsiness or dizziness

May cause damage to organs through prolonged or repeated exposure

May be fatal if swallowed and enters airways

Highly flammable liquid and vapor



Appearance opaque

Physical state liquid

Odor aromatic

Precautionary Statements

Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/mixing/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

Response

IF exposed or concerned: Get medical advice/attention

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

If skin irritation occurs: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Rinse mouth

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

Toxic to aquatic life with long lasting effects May be harmful in contact with skin SEE SAFETY DATA SHEET

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
TOLUENE	108-88-3	30 - 60%
METHYL ISOBUTYL KETONE	108-10-1	30 - 60%

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

eye irritation persists, consult a specialist.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If skin irritation persists, call a physician.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention immediately.

Ingestion Call a physician or poison control center immediately. Aspiration hazard. Do not induce

vomiting without medical advice.

Self-protection of the first aiderUse personal protective equipment. Avoid contact with eyes, skin and clothing.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes FLAMMABLE

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all

sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containmentRemove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

Methods for cleaning up If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated

absorbent, container and unused contents in accordance with local, state and federal

regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Close container after each use. Avoid contact with eyes, skin and clothing. Do not eat, drink

or smoke when using this product. If splashes are likely to occur, wear goggles. Wear protective gloves/clothing. Do not burn, or use a cutting torch on, the empty drum. When used in a mixture, read the labels and safety data sheets of all components. Wash

thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep away from heat, sparks and flame. VAPORS MAY CAUSE FLASH FIRE. Use only in

an area containing flame proof equipment. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Prevent build-up of vapors by opening all windows and doors to achieve cross

ventilation. Keep out of the reach of children.

Incompatible products Strong oxidizing agents. Strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure quidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
TOLUENE	TWA: 20 ppm	TWA: 100 ppm	500 ppm
108-88-3		TWA: 375 mg/m ³	
		STEL: 150 ppm	
		STEL: 560 mg/m ³	
		TWA: 200 ppm	
		Ceiling: 300 ppm	
METHYL ISOBUTYL KETONE	TWA: 20 ppm	TWA: 50 ppm	500 ppm
108-10-1	STEL: 75 ppm	TWA: 205 mg/m ³	
		STEL: 75 ppm	
		STEL: 300 mg/m ³	
		TWA: 100 ppm	
		TWA: 410 mg/m ³	

Appropriate engineering controls

Engineering measures Sufficient ventilation, in volume and pattern, should be provided through both local and

> general exhaust to keep the air contaminant concentration below current applicable OSHA Permissible Exposure Limits (PEL) and ACGIH's Threshold Limit Values (TLV).

> Appropriate ventilation should be employed to remove hazardous decomposition products

formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Safety glasses with side-shields If splashes are likely to occur, wear face-shield. Eye/face protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, Skin and body protection

as appropriate, to prevent skin contact.

Respiratory protection Use only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

Appearance opaque Odor aromatic

No information available Color Odor threshold No information available

Remarks Property Values

рΗ No data available Melting point / freezing point No data available

110 °C / 230 °F

Boiling point / boiling range 5 °C / 41 °F Flash point

Pensky Martens - Closed Cup **Evaporation rate** No data available

Flammability (solid, gas) Not applicable

Flammability Limit in Air No data available Upper flammability limit N/A

Lower flammability limit 1.0

Vapor pressure No data available

Vapor density No data available Specific gravity 0.83453 g/cm3

Water solubility Insoluble in cold water

Solubility in other solvents

No data available Partition coefficient: n-octanol/water No data available No data available **Autoignition temperature** No data available **Decomposition temperature**

No data available Kinematic viscosity Dynamic viscosity No data available

Other Information

Density 6.96 lbs/gal Volatile organic compounds (VOC) 6.96 lbs/gal

content

Total volatiles weight percent 100 % Total volatiles volume percent 100 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents, Strong acids

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact Causes serious eye irritation.

Skin contact CAUSES SKIN IRRITATION. Irritating to skin.

Ingestion Harmful if swallowed. Potential for aspiration if swallowed. Aspiration may cause pulmonary

edema and pneumonitis.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
TOLUENE	= 2600 mg/kg (Rat)	= 12000 mg/kg (Rabbit)	= 12.5 mg/L (Rat) 4 h
108-88-3			
METHYL ISOBUTYL KETONE	= 2080 mg/kg (Rat)	= 3000 mg/kg (Rabbit)	= 8.2 mg/L (Rat) 4 h
108-10-1			. ,

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Irritating to eyes and skin.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity NOTICE: Reports have associated repeated and prolonged occupational overexposure to

solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. May cause

cancer. Substances known to impair fertility.

SensitizationNo information available. **Mutagenicity**No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

our on regormenty	1110 (4510 501	on maleatee miletion each	ragono, nao notoa any mg	grouterit ao a carentegori.
Component	ACGIH	IARC	NTP	OSHA
TOLUENE		Group 3		
108-88-3				
METHYL ISOBUTYL	A3	Group 2B		X
KETONE				ļ
108-10-1				

Reproductive effects Suspected of damaging fertility or the unborn child.

STOT - single exposure Skin, Eyes, Central Nervous System (CNS)

STOT - repeated exposure
Target organ effects

Causes damage to organs through prolonged or repeated exposure
Central nervous system, Eyes, kidney, liver, respiratory system, Skin.

Aspiration hazard Risk of serious damage to the lungs (by aspiration).

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
TOLUENE	12.5: 72 h Pseudokirchneriella	5.8: 96 h Oncorhynchus mykiss	11.5: 48 h Daphnia magna mg/L
108-88-3	subcapitata mg/L EC50 static 433:	mg/L LC50 semi-static 12.6: 96 h	EC50 5.46 - 9.83: 48 h Daphnia
	96 h Pseudokirchneriella	Pimephales promelas mg/L LC50	magna mg/L EC50 Static
	subcapitata mg/L EC50	static 54: 96 h Oryzias latipes mg/L	
		LC50 static 14.1 - 17.16: 96 h	
		Oncorhynchus mykiss mg/L LC50	
		static 11.0 - 15.0: 96 h Lepomis	
		macrochirus mg/L LC50 static 5.89 -	
		7.81: 96 h Oncorhynchus mykiss	
		mg/L LC50 flow-through 28.2: 96 h	
		Poecilia reticulata mg/L LC50	
		semi-static 15.22 - 19.05: 96 h	
		Pimephales promelas mg/L LC50	
		flow-through 50.87 - 70.34: 96 h	
		Poecilia reticulata mg/L LC50 static	
METHYL ISOBUTYL KETONE	400: 96 h Pseudokirchneriella	496 - 514: 96 h Pimephales	170: 48 h Daphnia magna mg/L
108-10-1	subcapitata mg/L EC50	promelas mg/L LC50 flow-through	EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
TOLUENE	2.65
108-88-3	
METHYL ISOBUTYL KETONE	1.19
108-10-1	

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

Component	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
TOLUENE 108-88-3	U220	Included in waste streams: F005, F024, F025, F039, K015, K036, K037, K149, K151		U220
METHYL ISOBUTYL KETONE 108-10-1		Included in waste stream: F039		U161

Component	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
	Organic Compounds			
TOLUENE			Toxic waste	
108-88-3			waste number F025	
			Waste description:	
			Condensed light ends, spent	
			filters and filter aids, and	
			spent desiccant wastes from	
			the production of certain	
			chlorinated aliphatic	
			hydrocarbons, by free	
			radical catalyzed processes.	
			These chlorinated aliphatic	
			hydrocarbons are those	
			having carbon chain lengths	
			ranging from one to and	
			including five, with varying	
			amounts and positions of	
			chlorine substitution.	

Component	CAWAST
TOLUENE	Toxic
108-88-3	Ignitable

14. TRANSPORT INFORMATION

DOT

UN/ID no. 1263

Proper Shipping Name Paint related material

Hazard Class 3
Packing Group II
Emergency Response Guide 128

Number

<u>IATA</u>

UN/ID no. 1263

Proper Shipping Name Paint related material

Hazard Class 3
Packing Group II
ERG Code 366

Additional information Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA Complies **DSL/NDSL** Complies Complies **EINECS/ELINCS** Complies **ENCS IECSC** Complies Complies **KECL PICCS** Complies **AICS** Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances **IECSC** - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61): HAPS Data

Component

TOLÜENE

METHYL ISOBUTYL KETONE

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

Component	SARA 313 - Threshold Values	
TOLUENE - 108-88-3	1.0	
METHYL ISOBUTYL KETONE - 108-10-1	1.0	

SARA 311/312 Hazardous

Categorization

Acute Health Hazard Yes **Chronic Health Hazard** Yes Fire Hazard Yes **Sudden Release of Pressure Hazard** No **Reactive Hazard** No

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
TOLUENE	1000 lb	X	X	X
108-88-3				

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs	RQ
TOLUENE	1000 lb 1 lb		RQ 1000 lb final RQ
108-88-3			RQ 454 kg final RQ RQ 1 lb final
			RQ
			RQ 0.454 kg final RQ
METHYL ISOBUTYL KETONE	5000 lb		RQ 5000 lb final RQ
108-10-1			RQ 2270 kg final RQ

United States of America

California Prop. 65

WARNING! This product contains a chemical known in the State of California to cause cancer

Component	California Prop. 65
TOLUENE - 108-88-3	Developmental Female Reproductive
METHYL ISOBUTYL KETONE - 108-10-1	Carcinogen Developmental

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

	Component	New Jersey	Massachusetts	Pennsylvania
	TOLUENE 108-88-3	X	X	X
ME	THYL ISOBUTYL KETONE 108-10-1	X	X	X

|--|

F041-0019 THINNER CLEAR

Revision Date 16-Jul-2015

NFPA Health 2 Flammability 3 Instability 0 Physical hazard *
HMIS (Hazardous Health 2* Flammability 3 Reactivity 0

Material Information
System)

System

Prepared By Tnemec Regulatory Dept: 816-474-3400

Revision Date 16-Jul-2015

Revision Summary 9 4 5 7 10 8 11 14

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of MSDS



Safety Data Sheet

Issue Date 16-Jul-2015 Revision Date 16-Jul-2015 Revision Number 8

1. IDENTIFICATION

Product identifier

Product Code F041-0024
Product Name THINNER CLEAR

Other means of identification

Common Name NO. 24 THINNER

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 5
Acute toxicity - Inhalation (Vapors)	Category 4
Serious eye damage/eye irritation	Category 2B
Specific target organ toxicity (single exposure)	Category 3
Aspiration toxicity	Category 2
Flammable Liquids	Category 3

Label elements

EMERGENCY OVERVIEW

WARNING

Hazard statements

Harmful if swallowed

May be harmful in contact with skin

Harmful if inhaled

Causes eye irritation

May cause respiratory irritation. May cause drowsiness or dizziness

May be harmful if swallowed and enters airways

Flammable liquid and vapor



Appearance opaque Physical state liquid Odor aromatic

Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/mixing/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Wear protective gloves/protective clothing/eye protection/face protection

Keep cool

Response

Call a POISON CENTER or doctor/physician if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

May be harmful in contact with skin SEE SAFETY DATA SHEET

Acute Toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
Trade secret	-	60 - 100%

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

symptoms persist, call a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If symptoms persist, call a physician.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention immediately.

Ingestion Call a physician or poison control center immediately. Aspiration hazard. Do not induce

vomiting without medical advice.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic

compounds. Carbon oxides. Hydrocarbons.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all

sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system.

Methods and material for containment and cleaning up

F041-0024 THINNER CLEAR

Revision Date 16-Jul-2015

Methods for containment Remove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

absorbent, container and unused contents in accordance with local, state and federal

regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Close container after each use. Avoid contact with eyes, skin and clothing. Do not eat, drink

or smoke when using this product. If splashes are likely to occur, wear goggles. Wear protective gloves/clothing. Do not burn, or use a cutting torch on, the empty drum. When used in a mixture, read the labels and safety data sheets of all components. Wash

thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of

children.

Incompatible products Strong oxidizing agents. Strong acids. Alkaline.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Trade secret	TWA: 50 ppm	TWA: 100 ppm TWA: 465 mg/m³	800 ppm

Appropriate engineering controls

Engineering measuresSufficient ventilation, in volume and pattern, should be provided through both local and

general exhaust to keep the air contaminant concentration below current applicable OSHA Permissible Exposure Limits (PEL) and ACGIH"s Threshold Limit Values (TLV).

Appropriate ventilation should be employed to remove hazardous decomposition products

formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Use chemical resistant splash type goggles.

Skin and body protectionWear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

Respiratory protectionUse only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

Appearance opaque Odor aromatic

Color No information available Odor threshold No information available

Property Remarks Values

No data available

Melting point / freezing point No data available

Boiling point / boiling range 147 °C / 297 °F Flash point 39 °C / 102 °F

Pensky Martens - Closed Cup

Evaporation rate No data available Flammability (solid, gas) Not applicable Flammability Limit in Air No data available

Upper flammability limit N/A Lower flammability limit 1.0

Vapor pressure No data available Vapor density No data available

Specific gravity 0.81535 a/cm3

Water solubility Insoluble in cold water

Solubility in other solvents No data available Partition coefficient: n-octanol/water No data available **Autoignition temperature** No data available **Decomposition temperature** No data available Kinematic viscosity No data available

Dynamic viscosity 0.8 mPas approx

Other Information

6.79999 lbs/gal Density Volatile organic compounds (VOC) 6.79999 lbs/gal

content

Total volatiles weight percent 100 % Total volatiles volume percent 100 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents, Strong acids, Alkaline

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact Causes serious eye irritation.

Skin contact May cause irritation.

Ingestion Harmful if swallowed. Potential for aspiration if swallowed. Aspiration may cause pulmonary

edema and pneumonitis.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Trade secret	= 1600 mg/kg (Rat) = 1670 mg/kg	= 12.6 mL/kg (Rabbit) = 12600	> 2000 ppm (Rat) 4 h
	(Rat)	μL/kg(Rabbit)	

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity NOTICE: Reports have associated repeated and prolonged occupational overexposure to

solvents with permanent brain and nervous system damage. Intentional misuse by

deliberately concentrating and inhaling the contents may be harmful or fatal.

Sensitization No information available. **Mutagenicity** No information available.

Carcinogenicity There are no known carcinogenic chemicals in this product.

Reproductive effects No information available.

STOT - single exposure Skin, Eyes, Central Nervous System (CNS), Peripheral Nervous System (PNS), Respiratory

system

STOT - repeated exposure No information available

Aspiration hazard Risk of serious damage to the lungs (by aspiration).

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
Trade secret		126 - 137: 96 h Pimephales	
		promelas mg/L LC50 flow-through	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
Trade secret	1.98

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Paint related material

IATA

UN/ID no. 1263

Proper Shipping Name N-AMYL METHYL KETONE

Hazard Class 3
Packing Group III
ERG Code 366

<u>Additional information</u> Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

Complies **TSCA** Complies **DSL/NDSL** Complies **EINECS/ELINCS** Complies **ENCS** Complies **IECSC** Complies **KECL PICCS** Complies **AICS** Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372

SARA 311/312 Hazardous

Categorization

Acute Health Hazard Yes
Chronic Health Hazard No
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

CERCLA

United States of America

California Prop. 65

This product does not contain any Proposition 65 chemicals

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
Trade secret	X	X	X

16. OTHER INFORMATION

NFPA Health 2 Flammability 2 Instability 0 Physical hazard -

HMIS (Hazardous Health 2 Flammability 2 Reactivity 0

<u>Material Information</u>

System)

Prepared By Tnemec Regulatory Dept: 816-474-3400

Revision Date 16-Jul-2015

Revision Summary 9 4 5 7 10 8 11 14 15

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of MSDS



Safety Data Sheet

Issue Date 10-Jul-2015 Revision Date 10-Jul-2015 Revision Number 9

1. IDENTIFICATION

Product identifier

Product Code F041-0039
Product Name THINNER CLEAR

Other means of identification

Common Name NO. 39 THINNER

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Serious eye damage/eye irritation	Category 2B
Specific target organ toxicity (single exposure)	Category 3
Flammable Liquids	Category 3

Label elements

EMERGENCY OVERVIEW

WARNING

Hazard statements

Harmful if swallowed Causes eye irritation

May cause respiratory irritation. May cause drowsiness or dizziness

Flammable liquid and vapor



Appearance opaque Physical state liquid Odor aromatic

Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/mixing/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Wear protective gloves/protective clothing/eye protection/face protection

Keep cool

Response

Get medical advice/attention if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

Acute Toxicity

14.26497 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
2-HEPTANONE	-	30 - 60%
ETHYL 3-ETHOXYPROPIONATE	763-69-9	30 - 60%

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

eye irritation persists, consult a specialist.

Skin contactWash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If skin irritation persists, call a physician.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention immediately.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Water.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic

compounds. Carbon oxides. Hydrocarbons.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protective equipment. Avoid contact with eyes,

skin and clothing. Remove all sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containmentRemove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

Methods for cleaning up

If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Wear personal

protective equipment. Avoid contact with eyes, skin and clothing. Remove and wash contaminated clothing before re-use. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Do not breathe vapours or spray mist. Ensure adequate ventilation. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a cool, well-ventilated place. Keep out of the reach of

children.

Incompatible products Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
2-HEPTANONE	TWA: 50 ppm	TWA: 100 ppm TWA: 465 mg/m³	800 ppm

Appropriate engineering controls

Engineering measures Sufficient ventilation, in volume and pattern, should be provided through both local and

general exhaust to keep the air contaminant concentration below current applicable OSHA

Permissible Exposure Limits (PEL) and ACGIH's Threshold Limit Values (TLV).

Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Use chemical resistant splash type goggles.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

Respiratory protectionUse only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state

liquid opaque

AppearanceopaqueOdoraromatic

Color No information available Odor threshold No information available

Property Values Remarks

pHMelting point / freezing pointNo data availableNo data available

Boiling point / boiling range $72 \, ^{\circ}\text{C} \, / \, 162 \, ^{\circ}\text{F}$

Flash point 48 °C / 118 °F Pensky Martens - Closed Cup

Evaporation rateNo data availableFlammability (solid, gas)Not applicableFlammability Limit in AirNo data available

Upper flammability limit N/A Lower flammability limit 1.0

Vapor pressureNo data availableVapor densityNo data available

Specific gravity 0.87879 g/cm3

Water solubility Insoluble in cold water

Solubility in other solventsNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableKinematic viscosityNo data availableDynamic viscosityNo data available

Other Information

Density 7.32909 lbs/gal Volatile organic compounds (VOC) 6.26417 lbs/gal

content

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact Causes serious eye damage.

Skin contact CAUSES SKIN IRRITATION.

Ingestion

Harmful if swallowed. Potential for aspiration if swallowed. Aspiration may cause pulmonary edema and pneumonitis.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
2-HEPTANONE	= 1600 mg/kg (Rat) = 1670 mg/kg (Rat)	= 12.6 mL/kg(Rabbit)= 12600 μL/kg(Rabbit)	> 2000 ppm (Rat) 4 h
ETHYL 3-ETHOXYPROPIONATE 763-69-9	= 3200 mg/kg (Rat)	= 10 mL/kg(Rabbit)	

Information on toxicological effects

Symptoms

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Eye Damage.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available. **Mutagenicity** No information available.

Carcinogenicity There are no known carcinogenic chemicals in this product.

Reproductive effects No information available.

STOT - single exposure Eyes, Central Nervous System (CNS)

STOT - repeated exposure Aspiration hazardNo information available
No information available.

Acute Toxicity 14.26497 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

0.84656 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
2-HEPTANONE		126 - 137: 96 h Pimephales	
		promelas mg/L LC50 flow-through	
ETHYL 3-ETHOXYPROPIONATE		62: 96 h Pimephales promelas mg/L	970: 48 h Daphnia magna mg/L
763-69-9		LC50 static	EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
2-HEPTANONE	1.98
ETHYL 3-ETHOXYPROPIONATE 763-69-9	1.35

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name PAINT & RELATED MATERIAL-(NMFC 149980 SUB 2)

Emergency Response Guide 128

Number

IATA

UN/ID no. 1993

Proper Shipping Name FLAMMABLE LIQUID N.O.S. (HEXYL ACETATE)

Hazard Class 3
Packing Group III
ERG Code 366

Additional information Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

Complies **TSCA** DSL/NDSL Complies Complies **EINECS/ELINCS** Does not comply **ENCS IECSC** Complies Does not comply **KECL PICCS** Does not comply **AICS** Does not comply

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372

SARA 311/312 Hazardous

Categorization

Acute Health Hazard Yes
Chronic Health Hazard No
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

CERCLA

United States of America

California Prop. 65

This product does not contain any Proposition 65 chemicals

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
2-HEPTANONE	X	X	X

16. OTHER INFORMATION

NFPA Health 2 Flammability 2 Instability 1 Physical hazard *

HMIS (Hazardous Health 2 Flammability 2 Reactivity 1

Material Information

System)

Prepared By Tnemec Regulatory Dept: 816-474-3400

Revision Date 10-Jul-2015

Revision Summary 9 4 5 7 10 8 11 14 6 15

Disclaimer

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End of MSDS



Safety Data Sheet

Issue Date 16-Jul-2015 Revision Date 16-Jul-2015 Revision Number 9

1. IDENTIFICATION

Product identifier

Product Code F041-0042 Product Name THINNER CLEAR

Other means of identification

Common Name NO. 42 THINNER

UN/ID no. 1193

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable Liquids	Category 2

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Causes skin irritation Causes serious eye irritation May cause drowsiness or dizziness

Highly flammable liquid and vapor



Appearance opaque Physical state liquid Odor aromatic

Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/mixing/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

Response

Get medical advice/attention if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

If skin irritation occurs: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

May be harmful if swallowed SEE SAFETY DATA SHEET

Acute Toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
METHYL ETHYL KETONE	78-93-3	60 - 100%

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

eye irritation persists, consult a specialist.

Skin contactWash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If skin irritation persists, call a physician.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention immediately.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic

compounds. Carbon oxides. Hydrocarbons.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protective equipment. Avoid contact with eyes,

skin and clothing. Remove all sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containmentRemove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

Methods for cleaning up

If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Wear personal

protective equipment. Avoid contact with eyes, skin and clothing. Remove and wash contaminated clothing before re-use. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Do not breathe vapours or spray mist. Ensure adequate ventilation. Do not eat, drink or smoke when using

this product. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of

children.

Incompatible products Strong oxidizing agents. copper. Strong acids. Amines.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
METHYL ETHYL KETONE 78-93-3	TWA: 200 ppm STEL: 300 ppm	TWA: 200 ppm TWA: 590 mg/m³ STEL: 300 ppm STEL: 885 mg/m³	3000 ppm

Appropriate engineering controls

Engineering measures Sufficient ventilation, in volume and pattern, should be provided through both local and

general exhaust to keep the air contaminant concentration below current applicable OSHA

Permissible Exposure Limits (PEL) and ACGIH"s Threshold Limit Values (TLV). Appropriate ventilation should be employed to remove hazardous decomposition products

formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

face-shield.

Skin and body protectionWear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

Respiratory protectionUse only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

Appearance opaque Odor aromatic

Color No information available Odor threshold No information available

Property Remarks Values

No data available Melting point / freezing point

No data available

Boiling point / boiling range 78 °C / 172 °F

-5 °C / 23 °F Flash point Pensky Martens - Closed Cup

Evaporation rate No data available Not applicable

Flammability (solid, gas) Flammability Limit in Air No data available

Upper flammability limit N/A Lower flammability limit 1.0

Vapor pressure No data available Vapor density No data available

Specific gravity 0.80456 a/cm3

Water solubility Insoluble in cold water

Solubility in other solvents No data available Partition coefficient: n-octanol/water No data available **Autoignition temperature** No data available **Decomposition temperature** No data available Kinematic viscosity No data available **Dynamic viscosity** No data available

Other Information

Density 6.71001 lbs/gal 6.71001 lbs/gal Volatile organic compounds (VOC)

content

Total volatiles weight percent 100 % Total volatiles volume percent 100 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents, copper, Strong acids, Amines

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact Causes serious eye irritation.

Skin contact Irritating to skin.

Ingestion Harmful if swallowed. Potential for aspiration if swallowed. Aspiration may cause pulmonary

edema and pneumonitis.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
METHYL ETHYL KETONE	= 2737 mg/kg (Rat) = 2483 mg/kg	= 5000 mg/kg (Rabbit) = 6480	= 11700 ppm (Rat) 4 h
78-93-3	(Rat)	mg/kg (Rabbit)	

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Irritating to eyes and skin.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity NOTICE: Reports have associated repeated and prolonged occupational overexposure to

solvents with permanent brain and nervous system damage. Intentional misuse by

deliberately concentrating and inhaling the contents may be harmful or fatal.

Sensitization No information available.

Mutagenicity No information available.

Carcinogenicity There are no known carcinogenic chemicals in this product.

Reproductive effects No information available.

STOT - single exposure Skin, Eyes, Central Nervous System (CNS)

STOT - repeated exposure
Aspiration hazard
No information available
No information available.

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
METHYL ETHYL KETONE		3130 - 3320: 96 h Pimephales	5091: 48 h Daphnia magna mg/L
78-93-3		promelas mg/L LC50 flow-through	EC50 520: 48 h Daphnia magna
			mg/L EC50 4025 - 6440: 48 h
			Daphnia magna mg/L EC50 Static

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
METHYL ETHYL KETONE	0.29
78-93-3	

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

Component	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
METHYL ETHYL KETONE	U159	Included in waste streams:	200.0 mg/L regulatory level	U159
78-93-3		F005, F039		

Component	CAWAST	
METHYL ETHYL KETONE	Toxic	
78-93-3	Ignitable	

14. TRANSPORT INFORMATION

DOT

UN/ID no. 1193

Proper Shipping Name Methyl ethyl ketone

Hazard Class 3
Packing Group || |
Emergency Response Guide 127

Number

IATA

UN/ID no. 1193

Proper Shipping Name Methyl ethyl ketone

Hazard Class 3
Packing Group II
ERG Code 364

Additional information

Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

Ir	nte	rn	atio	onal	Inve	ento	ries
••	110		au	JIIGI	1114	,,,,,	1163

TSCA Complies Complies **DSL/NDSL** Complies **EINECS/ELINCS ENCS** Complies **IECSC** Complies **KECL** Complies Complies **PICCS** Complies **AICS**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

Component	SARA 313 - Threshold Values
METHYL ETHYL KETONE - 78-93-3	1.0

SARA 311/312 Hazardous

Categorization

Acute Health HazardYesChronic Health HazardNoFire HazardYesSudden Release of Pressure HazardNoReactive HazardNo

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs	RQ
METHYL ETHYL KETONE	5000 lb		RQ 5000 lb final RQ
78-93-3			RQ 2270 kg final RQ

United States of America

California Prop. 65

This product does not contain any Proposition 65 chemicals

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
METHYL ETHYL KETONE	X	X	X
78-93-3			

16. OTHER INFORMATION

NFPA Health 2 Flammability 3 Instability 1 Physical hazard - HMIS (Hazardous Health 2 Flammability 3 Reactivity 1

Material Information

Custom)

System)

Prepared By Tnemec Regulatory Dept: 816-474-3400

Revision Date 16-Jul-2015

Revision Summary 9 4 5 7 10 8 11 14 6 15

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of MSDS



Safety Data Sheet

Issue Date 16-Jul-2015 Revision Date 16-Jul-2015 Revision Number 7

1. IDENTIFICATION

Product identifier

Product Code F041-0048
Product Name THINNER CLEAR

Other means of identification

Common Name NO. 48 THINNER

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Inhalation (Vapors)	Category 5
Serious eye damage/eye irritation	Category 2B
Specific target organ toxicity (single exposure)	Category 3
Flammable Liquids	Category 3

Label elements

EMERGENCY OVERVIEW

WARNING

Hazard statements

May be harmful if inhaled Causes eye irritation

May cause respiratory irritation. May cause drowsiness or dizziness

Flammable liquid and vapor



Appearance opaque Physical state liquid Odor aromatic

Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/mixing/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Wear protective gloves/protective clothing/eye protection/face protection

Keep cool

Response

Get medical advice/attention if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store in a well-ventilated place. Keep container tightly closed Store locked up

Keep away from children

Disposa

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

May be harmful if swallowed

Toxic to aquatic life with long lasting effects

SEE SAFETY DATA SHEET

Acute Toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
HEXYL ACETATE	142-92-7	60 - 100%

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

eye irritation persists, consult a specialist.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If skin irritation persists, call a physician.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention immediately.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic

compounds. Carbon oxides. Hydrocarbons.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all

sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment Remove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

Methods for cleaning up If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated

absorbent, container and unused contents in accordance with local, state and federal

regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Close container after each use. Avoid contact with eyes, skin and clothing. Handle in

accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. When used in a mixture, read the labels and safety data sheets of all components. Wash

thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of

children.

Incompatible products Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Appropriate engineering controls

Engineering measures Sufficient ventilation, in volume and pattern, should be provided through both local and

general exhaust to keep the air contaminant concentration below current applicable OSHA

Permissible Exposure Limits (PEL) and ACGIH"s Threshold Limit Values (TLV).

Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Use chemical resistant splash type goggles.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

AppearanceopaqueOdoraromatic

Color No information available **Odor threshold** No information available

<u>Property</u> <u>Values</u> <u>Remarks</u>

pH No data available

Melting point / freezing point No data available

Melting point / freezing point

Boiling point / boiling range

116 °C / 241.0 °F

Flash point 57 °C / 134 °F Pensky Martens - Closed Cup

Evaporation rateNo data available

Flammability (solid, gas)

Not applicable
No data available

Flammability Limit in Air
Upper flammability limit N/A
Lower flammability limit 1.0

Vapor pressureNo data availableVapor densityNo data available

Specific gravity 0.8717 g/cm3

Water solubility Insoluble in cold water

Solubility in other solventsNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableKinematic viscosityNo data availableDynamic viscosityNo data available

Other Information

Density 7.26998 lbs/gal Volatile organic compounds (VOC) 7.26998 lbs/gal

content

Total volatiles weight percent 100 % Total volatiles volume percent 100 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact Causes serious eye irritation.

Skin contact CAUSES SKIN IRRITATION.

Ingestion Harmful if swallowed.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
HEXYL ACETATE	= 41500 μL/kg(Rat)	> 5 g/kg (Rabbit)	
142-92-7			

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Irritating to eyes and skin.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity NOTICE: Reports have associated repeated and prolonged occupational overexposure to

solvents with permanent brain and nervous system damage. Intentional misuse by

deliberately concentrating and inhaling the contents may be harmful or fatal.

Sensitization No information available. **Mutagenicity** No information available.

Carcinogenicity There are no known carcinogenic chemicals in this product.

Reproductive effectsNo information available.

STOT - single exposure Skin, Eyes, Central Nervous System (CNS)

STOT - repeated exposure No information available

Aspiration hazard Risk of serious damage to the lungs (by aspiration).

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
HEXYL ACETATE		3.7 - 4.4: 96 h Pimephales promelas	
142-92-7		mg/L LC50 flow-through	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal MethodsKeep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Paint related material

IATA

UN/ID no. 1993

Proper Shipping Name FLAMMABLE LIQUID N.O.S. (HEXYL ACETATE)

Hazard Class 3
Packing Group III
ERG Code 366

Additional information Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

Complies **TSCA** DSL/NDSL Complies Complies **EINECS/ELINCS** Complies **ENCS** Complies **IECSC KECL** Complies Complies **PICCS** Complies **AICS**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous

Categorization

Acute Health Hazard Yes
Chronic Health Hazard No
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

CERCLA

United States of America

California Prop. 65

This product does not contain any Proposition 65 chemicals

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

16. OTHER INFORMATION

NFPA Health 2 Flammability 2 Instability 0 Physical hazard - HMIS (Hazardous Health 2 Flammability 2 Reactivity 0

HMIS (Hazardous Material Information

System)

Prepared By Tnemec Regulatory Dept: 816-474-3400

Revision Date 16-Jul-2015

Revision Summary 9 4 5 7 10 8 11 14 15

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End of MSDS



Safety Data Sheet

Issue Date 28-Jul-2015 Revision Date 28-Jul-2015 Revision Number 8

1. IDENTIFICATION

Product identifier

Product Code F041-0049
Product Name THINNER CLEAR

Other means of identification

Common Name NO. 49 THINNER

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2B
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Flammable Liquids	Category 3

Label elements

EMERGENCY OVERVIEW

WARNING

Hazard statements

Causes skin irritation Causes eye irritation

May cause respiratory irritation. May cause drowsiness or dizziness

May cause damage to organs through prolonged or repeated exposure

Flammable liquid and vapor



Appearance opaque Physical state liquid Odor aromatic

Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/mixing/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

Response

Get medical advice/attention if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

If skin irritation occurs: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

Acute Toxicity

100 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
P-CHLOROBENZOTRIFLUORIDE	98-56-6	60 - 100%

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

symptoms persist, call a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If skin irritation persists, call a physician.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention immediately.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic

compounds. Carbon oxides. Hydrocarbons. Chlorine. Fluorine.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all

sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containmentRemove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

Methods for cleaning up If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated

absorbent, container and unused contents in accordance with local, state and federal

regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Avoid contact with eyes, skin and clothing. Handle in accordance with good industrial

hygiene and safety practice. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. When used in a mixture, read the labels

and safety data sheets of all components. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Keep out of the reach of children. Keep container tightly closed in a dry and well-ventilated **Storage**

Incompatible products Strong oxidizing agents. Strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
P-CHLOROBENZOTRIFLUORIDE	TWA: 2.5 mg/m ³	-	
98-56-6			

Appropriate engineering controls

Sufficient ventilation, in volume and pattern, should be provided through both local and **Engineering measures**

general exhaust to keep the air contaminant concentration below current applicable OSHA Permissible Exposure Limits (PEL) and ACGIH's Threshold Limit Values (TLV).

Appropriate ventilation should be employed to remove hazardous decomposition products

formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Use chemical resistant splash type goggles.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

Use only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh Respiratory protection

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

Handle in accordance with good industrial hygiene and safety practice. General hygiene considerations

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

Odor **Appearance** opaque aromatic

Odor threshold No information available Color No information available

Property Remarks Values

No data available Melting point / freezing point

No data available

Boiling point / boiling range 139 °C / 282 °F

Flash point 40 °C / 104 °F Pensky Martens - Closed Cup

F041-0049 THINNER CLEAR

Evaporation rateNo data availableFlammability (solid, gas)Not applicableFlammability Limit in AirNo data available

Upper flammability limit N/A Lower flammability limit 1.0

Vapor pressureNo data availableVapor densityNo data available

Specific gravity 1.34292 g/cm3

Water solubility Insoluble in cold water

Solubility in other solventsNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableKinematic viscosityNo data availableDynamic viscosityNo data available

Other Information

Density 11.19996 lbs/gal Volatile organic compounds (VOC) .000 lbs/gal

content

Total volatiles weight percent 100 % Total volatiles volume percent 100 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents, Strong acids

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons. Chlorine. Fluorine.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact Causes serious eye irritation.

Skin contact Irritating to skin.

Ingestion Harmful if swallowed.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
P-CHLOROBENZOTRIFLUORIDE	= 13 g/kg (Rat)	> 2 mL/kg (Rabbit)	= 33 mg/L (Rat) 4 h
98-56-6			_ , ,

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Irritating to eyes and skin.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity NOTICE: Reports have associated repeated and prolonged occupational overexposure to

solvents with permanent brain and nervous system damage. Intentional misuse by

deliberately concentrating and inhaling the contents may be harmful or fatal.

Sensitization No information available.

Mutagenicity No information available.

Carcinogenicity There are no known carcinogenic chemicals in this product.

Reproductive effects No information available.

STOT - single exposure Skin, Eyes, Central Nervous System (CNS)

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure

Target organ effects Eyes, Skin, Central nervous system, liver, kidney.

Aspiration hazard No information available.

Acute Toxicity 100 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

100 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
P-CHLOROBENZOTRIFLUORIDE		11.5 - 15.8: 48 h Lepomis	3.68: 48 h Daphnia magna mg/L
98-56-6		macrochirus mg/L LC50 static	EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
P-CHLOROBENZOTRIFLUORIDE	3.7
98-56-6	

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Paint related material

IATA

UN/ID no. 1263

Proper Shipping Name Paint related material

Hazard Class 3
Packing Group III
ERG Code 366

<u>Additional information</u> Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

Complies **TSCA DSL/NDSL** Complies Complies **EINECS/ELINCS** Complies **ENCS IECSC** Complies **KECL** Complies **PICCS** Complies **AICS** Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous

Categorization

Acute Health HazardYesChronic Health HazardNoFire HazardYesSudden Release of Pressure HazardNoReactive HazardNo

CERCLA

United States of America

California Prop. 65

This product does not contain any Proposition 65 chemicals

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
P-CHLOROBENZOTRIFLUORIDE	X		X
98-56-6			

16. OTHER INFORMATION

NFPA Health 1 Flammability 2 Instability 0 Physical hazard - HMIS (Hazardous Health 1 Flammability 2 Reactivity 0

Material Information

System)

Prepared By Tnemec Regulatory Dept: 816-474-3400

Revision Date 28-Jul-2015

Revision Summary 9 4 5 7 10 8 11 14 15

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of MSDS

TNEMEC

Safety Data Sheet

Issue Date 16-Jul-2015 Revision Date 16-Jul-2015 Revision Number 7

1. IDENTIFICATION

Product identifier

Product Code F041-0050 Product Name THINNER CLEAR

Other means of identification

Common Name NO. 50 THINNER

UN/ID no. 1263

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Serious eye damage/eye irritation	Category 2B
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Flammable Liquids	Category 2

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Harmful if swallowed Causes eye irritation

May cause respiratory irritation. May cause drowsiness or dizziness

May cause damage to organs through prolonged or repeated exposure

Highly flammable liquid and vapor



Appearance opaque Physical state liquid Odor aromatic

Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/mixing/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Wear protective gloves/protective clothing/eye protection/face protection

Keep cool

Response

Get medical advice/attention if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store in a well-ventilated place. Keep container tightly closed Store locked up

Keep away from children

Disposa

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

Causes mild skin irritation SEE SAFETY DATA SHEET

Acute Toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
METHYL N-PROPYL KETONE	107-87-9	60 - 100%

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

symptoms persist, call a physician.

Skin contactWash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If skin irritation persists, call a physician.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention immediately.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately.

Self-protection of the first aiderUse personal protective equipment. Avoid contact with eyes, skin and clothing.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic

compounds. Carbon oxides. Hydrocarbons. Formaldehyde.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all

sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment Remove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

Methods for cleaning up

If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Close container after each use. Avoid contact with eyes, skin and clothing. Do not eat, drink

or smoke when using this product. If splashes are likely to occur, wear goggles. Wear protective gloves/clothing. Do not burn, or use a cutting torch on, the empty drum. When used in a mixture, read the labels and safety data sheets of all components. Wash

thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of

children.

Incompatible products Strong acids. Strong oxidizing agents. Bases. Peroxides. copper. Reducing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
METHYL N-PROPYL KETONE 107-87-9	STEL: 150 ppm	TWA: 200 ppm TWA: 700 mg/m³ STEL: 250 ppm STEL: 875 mg/m³	1500 ppm

Appropriate engineering controls

Engineering measures Sufficient ventilation, in volume and pattern, should be provided through both local and

general exhaust to keep the air contaminant concentration below current applicable OSHA

Permissible Exposure Limits (PEL) and ACGIH"s Threshold Limit Values (TLV).

Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Use chemical resistant splash type goggles.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

Respiratory protection Use only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

Appearance opaque Odor aromatic

Color No information available Odor threshold No information available

Property Values Remarks

pH No data available

Melting point / freezing point

No data available

Boiling point / boiling range 102 °C / 245 °F

Flash point 8 °C / 46 °F Pensky Martens - Closed Cup

Evaporation rateNo data availableFlammability (solid, gas)Not applicableFlammability Limit in AirNo data available

Upper flammability limit N/A
Lower flammability limit 1.0

Vapor pressureNo data availableVapor densityNo data available

Specific gravity 0.8057 g/cm3

Water solubility Insoluble in cold water

Solubility in other solventsNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableKinematic viscosityNo data availableDynamic viscosityNo data available

Other Information

Density 6.71953 lbs/gal Volatile organic compounds (VOC) 6.71953 lbs/gal

content

Total volatiles weight percent 100 % Total volatiles volume percent 100 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks. Exposure to air or moisture over prolonged periods.

Incompatible materials

Strong acids, Strong oxidizing agents, Bases, Peroxides, copper, Reducing agents

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons. Formaldehyde.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact Causes serious eye irritation.

Skin contact Irritating to skin.

Ingestion Harmful if swallowed.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
METHYL N-PROPYL KETONE	= 1600 mg/kg (Rat)	= 6480 mg/kg (Rat) = 6500 mg/kg	= 2000 ppm (Rat) 4 h
107-87-9		(Rabbit)	

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Irritating to eyes and skin.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity NOTICE: Reports have associated repeated and prolonged occupational overexposure to

solvents with permanent brain and nervous system damage. Intentional misuse by

deliberately concentrating and inhaling the contents may be harmful or fatal.

Sensitization No information available. **Mutagenicity** No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Reproductive effectsNo information available.

STOT - single exposure Skin, Eyes, Central Nervous System (CNS)

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure

Target organ effects Central nervous system, Eyes, respiratory system, Skin.

Aspiration hazard No information available.

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
METHYL N-PROPYL KETONE		1190 - 1290: 96 h Pimephales	
107-87-9		promelas mg/L LC50 flow-through	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
METHYL N-PROPYL KETONE	0.91
107-87-9	

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

Component	CAWAST
METHYL N-PROPYL KETONE	Toxic
107-87-9	Ignitable

14. TRANSPORT INFORMATION

DOT

UN/ID no. 1263

Proper Shipping Name Paint related material

Hazard Class 3
Packing Group II
Emergency Response Guide 128

Number

<u>IATA</u>

UN/ID no. 1263

Proper Shipping Name Paint related material

Hazard Class 3
Packing Group II
ERG Code 364

Additional information Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

Complies **TSCA** Complies **DSL/NDSL EINECS/ELINCS** Complies Complies **ENCS IECSC** Complies Complies **KECL** Complies **PICCS AICS** Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous

Categorization

Acute Health Hazard Yes
Chronic Health Hazard No
Fire Hazard Yes

No

No

Sudden Release of Pressure Hazard Reactive Hazard

CERCLA

United States of America

California Prop. 65

This product does not contain any Proposition 65 chemicals

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
METHYL N-PROPYL KETONE	X	X	X
107-87-9			

16. OTHER INFORMATION

NFPA Health 2 Flammability 3 Instability 0 Physical hazard -

HMIS (Hazardous Health 2 Flammability 3 Reactivity 0

Material Information

System)

Prepared By Tnemec Regulatory Dept: 816-474-3400

Revision Date 16-Jul-2015

Revision Summary 9 4 5 7 10 8 11 14 15

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot quarantee that these are the only hazards which exist.

End of MSDS



Safety Data Sheet

Issue Date 24-Aug-2015 Revision Date 24-Aug-2015 Revision Number 8

1. IDENTIFICATION

Product identifier

Product Code F041-0051

Product Name THINNER ELECTROSTATIC THINNER

Other means of identification

Common Name NO. 51 THINNER

UN/ID no. 1993

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3
Flammable Liquids	Category 2

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Causes skin irritation Causes serious eye damage May cause drowsiness or dizziness

Highly flammable liquid and vapor



Appearance opaque

Physical state liquid

Odor aromatic

Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/mixing/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

Response

Get medical advice/attention if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

If skin irritation occurs: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

May be harmful if swallowed SEE SAFETY DATA SHEET

Acute Toxicity

14.45792 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
METHYL ETHYL KETONE	78-93-3	60 - 100%
ISOBUTYL ALCOHOL	78-83-1	1 - 10%

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call

a physician immediately.

Skin contactWash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If skin irritation persists, call a physician.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention immediately.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately.

Self-protection of the first aiderUse personal protective equipment. Avoid contact with eyes, skin and clothing.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic

compounds. Carbon oxides. Hydrocarbons. Oxides of nitrogen.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all

sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment Remove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

Methods for cleaning up

If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Close container after each use. Avoid contact with eyes, skin and clothing. Do not eat, drink

or smoke when using this product. If splashes are likely to occur, wear goggles. Wear protective gloves/clothing. Do not burn, or use a cutting torch on, the empty drum. When used in a mixture, read the labels and safety data sheets of all components. Wash

thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of

children.

Incompatible products Strong oxidizing agents. copper. Strong bases. Amines. Alkaline.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
METHYL ETHYL KETONE 78-93-3	TWA: 200 ppm STEL: 300 ppm	TWA: 200 ppm TWA: 590 mg/m³ STEL: 300 ppm STEL: 885 mg/m³	3000 ppm
ISOBUTYL ALCOHOL 78-83-1	TWA: 50 ppm	TWA: 50 ppm TWA: 150 mg/m³ TWA: 100 ppm TWA: 300 mg/m³	1600 ppm

Appropriate engineering controls

Engineering measures Sufficient ventilation, in volume and pattern, should be provided through both local and

general exhaust to keep the air contaminant concentration below current applicable OSHA

Permissible Exposure Limits (PEL) and ACGIH's Threshold Limit Values (TLV).

Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Use chemical resistant splash type goggles.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

Respiratory protection Use only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

F041-0051 THINNER ELECTROSTATIC THINNER

Information on basic physical and chemical properties

Physical state liquid

Appearance opaque Odor aromatic

Color No information available Odor threshold No information available

Property Remarks Values

No data available Melting point / freezing point

No data available

78 °C / 172 °F Boiling point / boiling range

Flash point -7 °C / 20 °F Pensky Martens - Closed Cup

Evaporation rate No data available Flammability (solid, gas) Not applicable

Flammability Limit in Air No data available

Upper flammability limit N/A Lower flammability limit 1.0

Vapor pressure No data available Vapor density No data available

Specific gravity 0.83493 a/cm3

Water solubility Insoluble in cold water

Solubility in other solvents No data available Partition coefficient: n-octanol/water No data available **Autoignition temperature** No data available **Decomposition temperature** No data available Kinematic viscosity No data available No data available **Dynamic viscosity**

Other Information

6.96328 lbs/gal Density Volatile organic compounds (VOC) 5.95639 lbs/gal

content

Total volatiles weight percent 85.54 % Total volatiles volume percent 88.78 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents, copper, Strong bases, Amines, Alkaline

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons. Oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact Causes serious eye damage.

Skin contact Irritating to skin.

Ingestion Harmful if swallowed.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
METHYL ETHYL KETONE 78-93-3	= 2483 mg/kg (Rat) = 2737 mg/kg (Rat)	= 6480 mg/kg (Rabbit) = 5000 mg/kg (Rabbit)	= 11700 ppm (Rat) 4 h
ISOBUTYL ALCOHOL 78-83-1	= 2460 mg/kg (Rat)	= 3400 mg/kg (Rabbit)	> 6.5 mg/L (Rat)4 h

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Eye Damage.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity NOTICE: Reports have associated repeated and prolonged occupational overexposure to

solvents with permanent brain and nervous system damage. Intentional misuse by

deliberately concentrating and inhaling the contents may be harmful or fatal.

Sensitization No information available. **Mutagenicity** No information available.

Carcinogenicity There are no known carcinogenic chemicals in this product.

Reproductive effects No information available.

STOT - single exposure Skin, Eyes, Central Nervous System (CNS)

STOT - repeated exposure No information available Aspiration hazard No information available.

Acute Toxicity 14.45792 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

18.0724 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
METHYL ETHYL KETONE		3130 - 3320: 96 h Pimephales	520: 48 h Daphnia magna mg/L
78-93-3		promelas mg/L LC50 flow-through	EC50 5091: 48 h Daphnia magna
			mg/L EC50 4025 - 6440: 48 h
			Daphnia magna mg/L EC50 Static
ISOBUTYL ALCOHOL	230: 48 h Desmodesmus	1370 - 1670: 96 h Pimephales	1300: 48 h Daphnia magna mg/L
78-83-1	subspicatus mg/L EC50	promelas mg/L LC50 flow-through	EC50 1070 - 1933: 48 h Daphnia
		375: 96 h Pimephales promelas	magna mg/L EC50 Static
		mg/L LC50 static 1480 - 1730: 96 h	
		Lepomis macrochirus mg/L LC50	
		flow-through 1120 - 1520: 96 h	
		Oncorhynchus mykiss mg/L LC50	
		flow-through	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
METHYL ETHYL KETONE	0.29
78-93-3	

F041-0051 THINNER ELECTROSTATIC THINNER

ISOBUTYL ALCOHOL	0.79
78-83-1	

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

Component	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
METHYL ETHYL KETONE	U159	Included in waste streams:	200.0 mg/L regulatory level	U159
78-93-3		F005, F039		
ISOBUTYL ALCOHOL	U140	Included in waste streams:		U140
78-83-1		F005, F039		

Component	CAWAST	
METHYL ETHYL KETONE	Toxic	
78-93-3	Ignitable	

14. TRANSPORT INFORMATION

DOT

UN/ID no. 1993

Proper Shipping Name FLAMMABLE LIQUID, N.O.S. (METHYL ETHYL KETONE, ISOBUTYL ALCOHOL),

Hazard Class 3
Packing Group || |
Emergency Response Guide 128

Number

IATA

UN/ID no. 1993

Proper Shipping Name FLAMMABLE LIQUID, N.O.S. (METHYL ETHYL KETONE, ISOBUTYL ALCOHOL),

Hazard Class 3
Packing Group II
ERG Code 364

Additional information Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

Complies **TSCA** Complies **DSL/NDSL** Complies **EINECS/ELINCS** Complies **ENCS IECSC** Complies Complies **KECL PICCS** Complies Complies **AICS**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

F041-0051 THINNER ELECTROSTATIC THINNER

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

Component	SARA 313 - Threshold Values
METHYL ETHYL KETONE - 78-93-3	1.0

SARA 311/312 Hazardous

Categorization

Acute Health Hazard Yes
Chronic Health Hazard No
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs	RQ
METHYL ETHYL KETONE	5000 lb		RQ 5000 lb final RQ
78-93-3			RQ 2270 kg final RQ
ISOBUTYL ALCOHOL	5000 lb		RQ 5000 lb final RQ
78-83-1			RQ 2270 kg final RQ

United States of America

California Prop. 65

This product does not contain any Proposition 65 chemicals

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
METHYL ETHYL KETONE 78-93-3	Х	X	Х
ISOBUTYL ALCOHOL 78-83-1	X	X	Х

16. OTHER INFORMATION

NFPA Health 2 Flammability 3 Instability 1 Physical hazard - HMIS (Hazardous Health 2 Flammability 3 Reactivity 1

Material Information

System)

Prepared By Tnemec Regulatory Dept: 816-474-3400 Revision Date 24-Aug-2015

Revision Summary 9 4 5 7 10 8 11 14 15

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of SDS

TNEMEC

Safety Data Sheet

Issue Date No data available Revision Date 23-Dec-2014 Revision Number 5

1. IDENTIFICATION

Product identifier

Product Code F041-0052

Product Name THINNER THINNER

Other means of identification

Common Name NO. 52 THINNER

UN/ID no. 1263

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable Liquids	Category 2

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Causes skin irritation Causes serious eye irritation May cause drowsiness or dizziness Highly flammable liquid and vapor



Appearance Colorless

Physical state liquid

Odor Strong aromatic

Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/mixing/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

Response

Get medical advice/attention if you feel unwell

If skin irritation occurs: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

May be harmful if swallowed SEE SAFETY DATA SHEET

Acute Toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
METHYL ETHYL KETONE	78-93-3	60 - 100%

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

F041-0052 THINNER THINNER

General advice If symptoms persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

symptoms persist, call a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If symptoms persist, call a physician.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention immediately.

Ingestion Drink 1 or 2 glasses of water to dilute. Do not induce vomiting. Consult a physician or

poison control center IMMEDIATELY. Treat symptomatically.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Foam. Water spray. Carbon dioxide (CO2). Dry chemical.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon dioxide (CO2). Hydrocarbons. Oxides of nitrogen.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containmentRemove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

Methods for cleaning up If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated

absorbent, container and unused contents in accordance with local, state and federal

regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Ensure adequate ventilation. Avoid contact with eyes, skin and clothing. Handle in

accordance with good industrial hygiene and safety practice. Keep away from open flames,

hot surfaces and sources of ignition. Take precautionary measures against static

discharges. Do not breathe vapours or spray mist. Do not eat, drink or smoke when using

this product. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of

children.

Incompatible products Strong oxidizing agents. copper. Strong acids. Amines. Alkalis.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
METHYL ETHYL KETONE 78-93-3	TWA: 200 ppm STEL: 300 ppm	TWA: 200 ppm TWA: 590 mg/m³ STEL: 300 ppm STEL: 885 mg/m³	3000 ppm

NIOSH IDLH: Immediately Dangerous to Life or Health

Appropriate engineering controls

Engineering measures Sufficient ventilation, in volume and pattern, should be provided through both local and

general exhaust to keep the air contaminant concentration below current applicable OSHA

Permissible Exposure Limits (PEL) and ACGIH's Threshold Limit Values (TLV).

Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Use chemical resistant splash type goggles.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

Respiratory protection Use only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

AppearanceColorlessOdorStrong aromatic

Color No information available Odor threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks</u>

pHMelting point / freezing pointNo data availableNo data available

Boiling point / boiling range 78 °C / 172.0 °F

Flash point -7 °C / 20.0 °F Pensky Martens - Closed Cup

Evaporation rate No data available

Flammability (solid, gas)

No information available
Flammability Limit in Air

No data available

Upper flammability limit N/A Lower flammability limit 2.0%

Vapor pressureNo data availableVapor densityNo data available

Specific gravity .80759 g/cm3

Water solubility Insoluble in cold water

Solubility in other solventsNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableKinematic viscosityNo data availableDynamic viscosityNo data available

Other Information

Density 6.72032 lbs/gal Volatile organic compounds (VOC) 6.679 lbs/gal content

Total volatiles weight percent 99.3900 % Total volatiles volume percent 99.5430 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents, copper, Strong acids, Amines, Alkalis

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon dioxide (CO2). Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact Severely irritating to eyes.

Skin contact Irritating to skin.

F041-0052 THINNER THINNER

Ingestion

Harmful if swallowed.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
METHYL ETHYL KETONE	= 2737 mg/kg (Rat) = 2483 mg/kg	= 5000 mg/kg (Rabbit) = 6480	= 11700 ppm (Rat) 4 h
78-93-3	(Rat)	mg/kg (Rabbit)	

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Skin disorders.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity NOTICE: Reports have associated repeated and prolonged occupational overexposure to

solvents with permanent brain and nervous system damage. Intentional misuse by

deliberately concentrating and inhaling the contents may be harmful or fatal.

SensitizationNo information available.MutagenicityNo information available.

Carcinogenicity There are no known carcinogenic chemicals in this product.

Reproductive effects No information available.

STOT - single exposure Skin, Eyes, Respiratory system, Central Nervous System (CNS)

STOT - repeated exposure No information available

Target organ effects Central nervous system, Eyes, respiratory system, Skin.

Aspiration hazard Based on product level data, this product does not meet the requirement to be classified as

an aspiration hazard. However, this product contains an ingredient that may cause

aspiration if swallowed.

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
METHYL ETHYL KETONE		3130 - 3320: 96 h Pimephales	5091: 48 h Daphnia magna mg/L
78-93-3		promelas mg/L LC50 flow-through	EC50 520: 48 h Daphnia magna
			mg/L EC50 4025 - 6440: 48 h
			Daphnia magna mg/L EC50 Static

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
METHYL ETHYL KETONE	0.29
78-93-3	

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

F041-0052 THINNER THINNER

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

Component	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
METHYL ETHYL KETONE	U159	Included in waste streams:	200.0 mg/L regulatory level	U159
78-93-3		F005, F039		

California Hazardous Waste Status

This product contains one or more substances that are listed with the State of California as a hazardous waste

Component	CAWAST
METHYL ETHYL KETONE	Toxic
78-93-3	Ignitable

14. TRANSPORT INFORMATION

DOT

UN/ID no. 1263

Proper Shipping Name Paint related material

Hazard Class 3
Packing Group II
Emergency Response Guide 128

Number

<u>IATA</u>

UN/ID no. 1263

Proper Shipping Name Paint related material

Hazard Class 3
Packing Group II
ERG Code 364

Additional information

Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes of Transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA Complies **DSL/NDSL** Complies **EINECS/ELINCS** Complies **ENCS** Complies **IECSC** Complies **KECL** Complies Complies **PICCS** Complies **AICS**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

Component	SARA 313 - Threshold Values	
METHYL ETHYL KETONE - 78-93-3	1.0	

SARA 311/312 Hazardous

Categorization

Acute Health Hazard Yes
Chronic Health Hazard No
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs	RQ
METHYL ETHYL KETONE	5000 lb		RQ 5000 lb final RQ
78-93-3			RQ 2270 kg final RQ

United States of America

California Prop. 65

This product does not contain any Proposition 65 chemicals

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
METHYL ETHYL KETONE	X	X	X
78-93-3			

16. OTHER INFORMATION

NFPA Health 1 Flammability 3 Instability 1 Physical hazard -

HMIS (Hazardous Health 1 Flammability 3 Reactivity 1

Material Information

System)

Prepared By Tnemec Regulatory Dept: 816-474-3400

Revision Date 23-Dec-2014

Revision Summary

9 14 15

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of MSDS



Safety Data Sheet

Issue Date 16-Jul-2015 Revision Date 16-Jul-2015 Revision Number 7

1. IDENTIFICATION

Product identifier

Product Code F041-0056
Product Name THINNER CLEAR

Other means of identification

Common Name NO. 56 THINNER

UN/ID no. 1263

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2B
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Flammable Liquids	Category 3

Label elements

EMERGENCY OVERVIEW

WARNING

Hazard statements

Causes skin irritation Causes eye irritation

May cause respiratory irritation. May cause drowsiness or dizziness

May cause damage to organs through prolonged or repeated exposure

Flammable liquid and vapor



Appearance opaque Physical state liquid Odor aromatic

Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/mixing/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

Response

Get medical advice/attention if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention If skin irritation occurs: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store in a well-ventilated place. Keep container tightly closed Store locked up

Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

May be harmful if swallowed May be harmful in contact with skin Toxic to aquatic life with long lasting effects SEE SAFETY DATA SHEET

Acute Toxicity

84.3068 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
P-CHLOROBENZOTRIFLUORIDE	98-56-6	60 - 100%
Trade secret	-	10 - 30%

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

eye irritation persists, consult a specialist.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If skin irritation persists, call a physician.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention immediately.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic

compounds. Carbon oxides. Hydrocarbons. Chlorine. Fluorine.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all

sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containmentRemove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

absorbent, container and unused contents in accordance with local, state and federal

regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Close container after each use. Avoid contact with eyes, skin and clothing. Handle in

accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. When used in a mixture, read the labels and safety data sheets of all components. Wash

thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of

children.

Incompatible products Strong oxidizing agents. Strong acids. Alkaline.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
P-CHLOROBENZOTRIFLUORIDE 98-56-6	TWA: 2.5 mg/m ³	-	
Trade secret	TWA: 50 ppm	TWA: 100 ppm TWA: 465 mg/m³	800 ppm

Appropriate engineering controls

Engineering measures Sufficient ventilation, in volume and pattern, should be provided through both local and

general exhaust to keep the air contaminant concentration below current applicable OSHA

Permissible Exposure Limits (PEL) and ACGIH"s Threshold Limit Values (TLV).

Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Use chemical resistant splash type goggles.

Skin and body protectionWear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

Respiratory protection Use only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

Appearance opaque Odor aromatic

Color No information available Odor threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks</u>

pH No data available
Melting point / freezing point No data available

Boiling point / boiling range 139 °C / 282 °F

Flash point 42 °C / 107 °F Pensky Martens - Closed Cup

Evaporation rateNo data availableFlammability (solid, gas)Not applicable

Flammability Limit in Air No data available

Upper flammability limit N/A
Lower flammability limit 1.0

Vapor pressureNo data availableVapor densityNo data available

Specific gravity 1.16894 g/cm3

Water solubility Insoluble in cold water

Solubility in other solventsNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableKinematic viscosityNo data availableDynamic viscosityNo data available

Other Information

Density 9.74899 lbs/gal Volatile organic compounds (VOC) 4.20332 lbs/gal

content

Total volatiles weight percent 89.08 % Total volatiles volume percent 86.26 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents, Strong acids, Alkaline

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons. Chlorine. Fluorine.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

F041-0056 THINNER CLEAR

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact Causes serious eye irritation.

Skin contact Irritating to skin.

Ingestion Harmful if swallowed.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
P-CHLOROBENZOTRIFLUORIDE	= 13 g/kg (Rat)	> 2 mL/kg (Rabbit)	= 33 mg/L (Rat) 4 h
98-56-6			
Trade secret	= 1600 mg/kg (Rat) = 1670 mg/kg	= 12.6 mL/kg (Rabbit) = 12600	> 2000 ppm (Rat) 4 h
	(Rat)	μL/kg(Rabbit)	

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Irritating to eyes and skin.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity NOTICE: Reports have associated repeated and prolonged occupational overexposure to

solvents with permanent brain and nervous system damage. Intentional misuse by

deliberately concentrating and inhaling the contents may be harmful or fatal.

SensitizationNo information available.MutagenicityNo information available.

Carcinogenicity There are no known carcinogenic chemicals in this product.

Reproductive effects No information available.

STOT - single exposure Skin, Eyes, Central Nervous System (CNS)

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure

Target organ effects Central nervous system, Eyes, Peripheral Nervous System (PNS), respiratory system, Skin.

Aspiration hazard No information available.

Acute Toxicity 84.3068 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

74.21915 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
P-CHLOROBENZOTRIFLUORIDE 98-56-6		11.5 - 15.8: 48 h Lepomis macrochirus mg/L LC50 static	3.68: 48 h Daphnia magna mg/L EC50
Trade secret		126 - 137: 96 h Pimephales promelas mg/L LC50 flow-through	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
P-CHLOROBENZOTRIFLUORIDE 98-56-6	3.7
Trade secret	1.98

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. TRANSPORT INFORMATION

DOT

UN/ID no. 1263

Proper Shipping Name Paint related material

Hazard Class 3
Packing Group III
Emergency Response Guide 128

Number

<u>IATA</u>

UN/ID no. 1263

Proper Shipping Name Paint related material

Hazard Class 3
Packing Group III
ERG Code 366

Additional information Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA Complies **DSL/NDSL** Complies Complies **EINECS/ELINCS** Does not comply **ENCS IECSC** Complies **KECL** Does not comply **PICCS** Does not comply **AICS** Does not comply

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous

Categorization

Acute Health Hazard Yes
Chronic Health Hazard No
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

CERCLA

United States of America

California Prop. 65

This product does not contain any Proposition 65 chemicals

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
P-CHLOROBENZOTRIFLUORIDE 98-56-6	Х		X
Trade secret	Х	X	X

16. OTHER INFORMATION

NFPA Health 2 Flammability 2 Instability 1 Physical hazard - HMIS (Hazardous Health 2 Flammability 2 Reactivity 1

HMIS (Hazardous
Material Information

Material Information System)

Prepared By

Tnemec Regulatory Dept: 816-474-3400

Revision Date 16-Jul-2015

Revision Summary 9 4 5 7 10 8 11 14 15

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of MSDS



Safety Data Sheet

Issue Date 16-Jul-2015 Revision Date 16-Jul-2015 Revision Number 9

1. IDENTIFICATION

Product identifier

Product Code F041-0059
Product Name F041-0059
THINNER GRAY

Other means of identification

Common Name NO. 59 THINNER

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 5
Acute toxicity - Dermal	Category 5
Serious eye damage/eye irritation	Category 2
Aspiration toxicity	Category 2

Label elements

EMERGENCY OVERVIEW

WARNING

Hazard statements

May be harmful if swallowed May be harmful in contact with skin Causes serious eye irritation

May be harmful if swallowed and enters airways



Appearance opaque Physical state liquid Odor aromatic

Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection

Response

Call a POISON CENTER or doctor/physician if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

Storage

Store locked up Keep away from children

Disposa

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

May be harmful in contact with skin SEE SAFETY DATA SHEET

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
ETHYLENE GLYCOL MONOPROPYL ETHER	2807-30-9	10 - 30%
(SKIN)		

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

symptoms persist, call a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If skin irritation persists, call a physician.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention immediately.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Water. Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic

compounds. Carbon oxides. Hydrocarbons.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all

sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment Remove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

Methods for cleaning up If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated

absorbent, container and unused contents in accordance with local, state and federal

regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Close container after each use. Avoid contact with eyes, skin and clothing. Handle in

accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. When used in a mixture, read the labels and safety data sheets of all components. Wash

thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of

children.

Incompatible products Incompatible with strong acids and bases. Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Appropriate engineering controls

Engineering measures Sufficient ventilation, in volume and pattern, should be provided through both local and

general exhaust to keep the air contaminant concentration below current applicable OSHA

Permissible Exposure Limits (PEL) and ACGIH"s Threshold Limit Values (TLV).

Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Safety glasses with side-shields Use chemical resistant splash type goggles. If splashes

are likely to occur, wear face-shield.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

Respiratory protectionUse only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

AppearanceopaqueOdoraromatic

ColorNo information availableOdor thresholdNo information available

<u>Property</u> <u>Values</u> <u>Remarks</u>

pH No data available
Melting point / freezing point No data available

Boiling point / boiling range 100 °C / 212 °F

Flash point No information available No information available

Evaporation rateNo data availableFlammability (solid, gas)Not applicableFlammability Limit in AirNo data available

Upper flammability limit N/A
Lower flammability limit 1.0

Vapor pressureNo data availableVapor densityNo data available

Specific gravity .97885 g/cm3

Water solubility Insoluble in cold water

Solubility in other solvents

No data available
Partition coefficient: n-octanol/water

No data available

Partition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data available

Kinematic viscosityNo data availableDynamic viscosityNo data available

Other Information

Density 8.14547 lbs/gal **Volatile organic compounds (VOC)** 7.601 lbs/gal

content

Total volatiles weight percent 100.0000 % Total volatiles volume percent 100.0000 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Incompatible with strong acids and bases, Strong oxidizing agents

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact Causes serious eye irritation.

Skin contact Irritating to skin.

Ingestion Harmful if swallowed. Potential for aspiration if swallowed. Aspiration may cause pulmonary

edema and pneumonitis.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
ETHYLENE GLYCOL MONOPROPYL ETHER (SKIN) 2807-30-9	= 3089 mg/kg(Rat)	= 870 mg/kg(Rabbit)= 960 μL/kg (Rabbit)	= 1530 ppm(Rat)7 h

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Irritating to eyes and skin.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity NOTICE: Reports have associated repeated and prolonged occupational overexposure to

solvents with permanent brain and nervous system damage. Intentional misuse by

deliberately concentrating and inhaling the contents may be harmful or fatal.

Sensitization No information available. **Mutagenicity** No information available.

F041-0059 THINNER GRAY

Revision Date 16-Jul-2015

Carcinogenicity There are no known carcinogenic chemicals in this product.

Reproductive effects No information available. STOT - single exposure No information available STOT - repeated exposure No information available

Aspiration hazard Risk of serious damage to the lungs (by aspiration).

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name paint, water base freezable Not regulated

IATA

Proper Shipping Name Not regulated

Additional information Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA Complies **DSL/NDSL** Complies

EINECS/ELINCS Does not comply **ENCS** Complies

IECSC Complies **KECL** Complies Complies **PICCS** Complies **AICS**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

Component HAPS Data

ETHYLENE GLYCOL MONOPROPYL ETHER (SKIN)

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

Component	SARA 313 - Threshold Values	
ETHYLENE GLYCOL MONOPROPYL ETHER (SKIN) - 2807-30-9	1.0	

SARA 311/312 Hazardous

Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

CERCLA

United States of America

California Prop. 65

This product does not contain any Proposition 65 chemicals

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
ETHYLENE GLYCOL MONOPROPYL ETHER (SKIN) 2807-30-9	X		X

16. OTHER INFORMATION

NFPA Health 2 Flammability 0 Instability 0 Physical hazard - Health 2 Flammability 0 Reactivity 0

Material Information

System)

Prepared By Tnemec Regulatory Dept: 816-474-3400 Revision Date 16-Jul-2015

Revision Summary 9 4 5 7 10 8 11 14 15

F041-0059 THINNER GRAY Revision Date 16-Jul-2015

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of MSDS



Safety Data Sheet

Issue Date 23-Jul-2015 Revision Date 23-Jul-2015 Revision Number 7

1. IDENTIFICATION

Product identifier

Product Code F041-0060 Product Name THINNER CLEAR

Other means of identification

Common Name NO. 60 THINNER

UN/ID no. 1263

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1B
Specific target organ toxicity (single exposure)	Category 3
Aspiration toxicity	Category 1
Flammable Liquids	Category 3

Label elements

EMERGENCY OVERVIEW

Danger					

Hazard statements

Harmful if swallowed

Harmful if inhaled

Causes skin irritation

Causes serious eye irritation

May cause genetic defects

May cause cancer

May cause respiratory irritation

May be fatal if swallowed and enters airways

Flammable liquid and vapor



Appearance opaque

Physical state liquid

Odor aromatic

Precautionary Statements

Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/mixing/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

Response

IF exposed or concerned: Get medical advice/attention

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

If skin irritation occurs: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Rinse mouth

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

Toxic to aquatic life with long lasting effects

SEE SAFETY DATA SHEET

Acute Toxicity 1.200178 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
METHYL N-AMYL KETONE	110-43-0	30 - 60%
N-BUTANOL (SKIN)	71-36-3	10 - 30%
AROMATIC HYDROCARBON MIXTURE	64742-95-6	10 - 30%
1,2,4-TRIMETHYLBENZENE	95-63-6	10 - 30%
1,3,5-TRIMETHYLBENZENE	108-67-8	1 - 10%
DIETHYLBENZENE	25340-17-4	1 - 10%
CUMENE (SKIN)	98-82-8	0.1 - 1%
ETHYL BENZENE	100-41-4	0.1 - 1%

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

symptoms persist, call a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If symptoms persist, call a physician.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention immediately.

Ingestion Call a physician or poison control center immediately. Aspiration hazard. Do not induce

vomiting without medical advice.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all

sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containmentRemove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

Methods for cleaning up If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated

absorbent, container and unused contents in accordance with local, state and federal

regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Close container after each use. Avoid contact with eyes, skin and clothing. Do not eat, drink

or smoke when using this product. If splashes are likely to occur, wear goggles. Wear protective gloves/clothing. Do not burn, or use a cutting torch on, the empty drum. When used in a mixture, read the labels and safety data sheets of all components. Wash

thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep away from heat, sparks and flame. Keep out of the reach of children. Keep container

tightly closed in a dry and well-ventilated place.

Incompatible products Strong oxidizing agents. Strong acids. Alkaline. Halogenated compounds. Lead.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
METHYL N-AMYL KETONE 110-43-0	TWA: 50 ppm	TWA: 100 ppm TWA: 465 mg/m ³	800 ppm
N-BUTANOL (SKIN) 71-36-3	TWA: 20 ppm	Skin Ceiling: 50 ppm Ceiling: 150 mg/m³ TWA: 100 ppm TWA: 300 mg/m³	1400 ppm

CUMENE (SKIN) 98-82-8	TWA: 50 ppm	TWA: 50 ppm TWA: 245 mg/m³ Skin	900 ppm
ETHYL BENZENE 100-41-4	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m³ STEL: 125 ppm STEL: 545 mg/m³	800 ppm

Appropriate engineering controls

Engineering measuresSufficient ventilation, in volume and pattern, should be provided through both local and

general exhaust to keep the air contaminant concentration below current applicable OSHA

Permissible Exposure Limits (PEL) and ACGIH"s Threshold Limit Values (TLV).

Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Use chemical resistant splash type goggles. If splashes are likely to occur, wear

face-shield.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid opaque

Appearance opaque Odor aromatic

ColorNo information availableOdor thresholdNo information available

PropertyValuesRemarkspHNo data availableMelting point / freezing pointNo data available

Boiling point / boiling range 116 °C / 241.0 °F

Flash point 37 °C / 98 °F Pensky Martens - Closed Cup

Evaporation rateNo data availableFlammability (solid, gas)Not applicableFlammability Limit in AirNo data available

Upper flammability limit N/A
Lower flammability limit 1.0

Vapor pressureNo data availableVapor densityNo data available

Specific gravity 0.83576 g/cm3

Water solubility Insoluble in cold water

Solubility in other solventsNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data available

Kinematic viscosityNo data availableDynamic viscosityNo data available

Other Information

Density 6.97021 lbs/gal Volatile organic compounds (VOC) 6.97021 lbs/gal

content

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents, Strong acids, Alkaline, Halogenated compounds, Lead

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact Causes serious eye damage. Causes serious eye irritation.

Skin contact Irritating to skin.

Ingestion May be harmful if swallowed and enters airways. Potential for aspiration if swallowed.

Aspiration may cause pulmonary edema and pneumonitis.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
METHYL N-AMYL KETONE 110-43-0	= 1600 mg/kg (Rat) = 1670 mg/kg (Rat)	= 12.6 mL/kg(Rabbit)= 12600 μL/kg(Rabbit)	> 2000 ppm (Rat) 4 h
N-BUTANOL (SKIN) 71-36-3	= 700 mg/kg (Rat) = 790 mg/kg (Rat)	= 3402 mg/kg(Rabbit)= 3400 mg/kg(Rabbit)	> 8000 ppm (Rat) 4 h
AROMATIC HYDROCARBON MIXTURE 64742-95-6	= 8400 mg/kg (Rat)	> 2000 mg/kg(Rabbit)	= 3400 ppm (Rat) 4 h
1,2,4-TRIMETHYLBENZENE 95-63-6	= 3280 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	= 18 g/m³ (Rat) 4 h
1,3,5-TRIMETHYLBENZENE 108-67-8	= 5000 mg/kg (Rat)		= 24 g/m³ (Rat) 4 h
CUMENE (SKIN) 98-82-8	= 1400 mg/kg (Rat)	= 12300 μL/kg (Rabbit)	> 3577 ppm (Rat) 6 h = 39000 mg/m³ (Rat) 4 h
ETHYL BENZENE 100-41-4	= 3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 17.2 mg/L (Rat)4 h

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Irritating to eyes and skin.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity NOTICE: Reports have associated repeated and prolonged occupational overexposure to

solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Substances

known to be mutagenic to man. May cause cancer.

SensitizationNo information available.MutagenicityMay cause genetic defects.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	ACGIH	IARC	NTP	OSHA
CUMENE (SKIN) 98-82-8		Group 2B	Reasonably Anticipated	X
ETHYL BENZENE 100-41-4	A3	Group 2B		X

Reproductive effects No information available.

STOT - single exposure Skin, Eyes, Central Nervous System (CNS), Respiratory system

STOT - repeated exposure No information available

Aspiration hazard Risk of serious damage to the lungs (by aspiration).

Acute Toxicity 1.200178 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

14.40097 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
METHYL N-AMYL KETONE 110-43-0		126 - 137: 96 h Pimephales	
	500 001 5	promelas mg/L LC50 flow-through	1007 0070 101 5 1 :
N-BUTANOL (SKIN) 71-36-3	500: 96 h Desmodesmus	1740: 96 h Pimephales promelas	1897 - 2072: 48 h Daphnia magna
/1-30-3	subspicatus mg/L EC50 500: 72 h Desmodesmus subspicatus mg/L	mg/L LC50 flow-through 1910000: 96 h Pimephales promelas µg/L	mg/L EC50 Static 1983: 48 h Daphnia magna mg/L EC50
	EC50	LC50 static 100000 - 500000: 96 h	Daprinia magna mg/L LC30
		Lepomis macrochirus µg/L LC50	
		static 1730 - 1910: 96 h Pimephales	
		promelas mg/L LC50 static	
AROMATIC HYDROCARBON		9.22: 96 h Oncorhynchus mykiss	6.14: 48 h Daphnia magna mg/L
MIXTURE		mg/L LC50	EC50
64742-95-6			
1,2,4-TRIMETHYLBENZENE		7.19 - 8.28: 96 h Pimephales	6.14: 48 h Daphnia magna mg/L
95-63-6		promelas mg/L LC50 flow-through	EC50
1,3,5-TRIMETHYLBENZENE		3.48: 96 h Pimephales promelas	50: 24 h Daphnia magna mg/L
108-67-8		mg/L LC50	EC50
CUMENE (SKIN)	2.6: 72 h Pseudokirchneriella	2.7: 96 h Oncorhynchus mykiss	0.6: 48 h Daphnia magna mg/L
98-82-8	subcapitata mg/L EC50	mg/L LC50 semi-static 6.04 - 6.61:	EC50 7.9 - 14.1: 48 h Daphnia
		96 h Pimephales promelas mg/L	magna mg/L EC50 Static
		LC50 flow-through 4.8: 96 h	
		Oncorhynchus mykiss mg/L LC50	
		flow-through 5.1: 96 h Poecilia	
		reticulata mg/L LC50 semi-static	

ETHYL BENZENE	4.6: 72 h Pseudokirchneriella	11.0 - 18.0: 96 h Oncorhynchus	1.8 - 2.4: 48 h Daphnia magna mg/L
100-41-4	subcapitata mg/L EC50 438: 96 h	mykiss mg/L LC50 static 32: 96 h	EC50
	Pseudokirchneriella subcapitata	Lepomis macrochirus mg/L LC50	
	mg/L EC50 2.6 - 11.3: 72 h	static 4.2: 96 h Oncorhynchus	
	Pseudokirchneriella subcapitata	mykiss mg/L LC50 semi-static 7.55 -	
	mg/L EC50 static 1.7 - 7.6: 96 h	11: 96 h Pimephales promelas mg/L	
	Pseudokirchneriella subcapitata	LC50 flow-through 9.6: 96 h Poecilia	
	mg/L EC50 static	reticulata mg/L LC50 static 9.1 -	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
METHYL N-AMYL KETONE 110-43-0	1.98
N-BUTANOL (SKIN) 71-36-3	0.785
1,2,4-TRIMETHYLBENZENE 95-63-6	3.63
CUMENE (SKIN) 98-82-8	3.55
ETHYL BENZENE 100-41-4	3.118

Other Adverse Effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

15.6: 96 h Pimephales promelas mg/L LC50 static

accordance with local, state and federal regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

Component	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
N-BUTANOL (SKIN) 71-36-3		Included in waste stream: F039		U031
CUMENE (SKIN) 98-82-8				U055
ETHYL BENZENE 100-41-4		Included in waste stream: F039		

Component	CAWAST
N-BUTANOL (SKIN)	Toxic
71-36-3	
CUMENE (SKIN)	Toxic
98-82-8	Ignitable
ETHYL BENZENE	Toxic
100-41-4	Ignitable

14. TRANSPORT INFORMATION

DOT

UN/ID no. 1263

Proper Shipping Name Paint related material

Hazard Class 3
Packing Group III
Emergency Response Guide 128

Number

IATA

UN/ID no. 1263

Proper Shipping Name Paint related material

Hazard Class 3
Packing Group III
ERG Code 366

Additional information Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA Complies **DSL/NDSL** Complies **EINECS/ELINCS** Complies **ENCS** Complies **IECSC** Complies Complies **KECL** Complies **PICCS** Complies **AICS**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

Component HAPS Data

CUMENE (SKIN) ETHYL BENZENE

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

Component	SARA 313 - Threshold Values	
N-BUTANOL (SKIN) - 71-36-3	1.0	
1,2,4-TRIMETHYLBENZENE - 95-63-6	1.0	
CUMENE (SKIN) - 98-82-8	1.0	
ETHYL BENZENE - 100-41-4	0.1	

SARA 311/312 Hazardous

Categorization

Acute Health Hazard Yes
Chronic Health Hazard Yes
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
ETHYL BENZENE 100-41-4	1000 lb	X	Х	Х

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs	RQ
N-BUTANOL (SKIN)	5000 lb		RQ 5000 lb final RQ
71-36-3			RQ 2270 kg final RQ
CUMENE (SKIN)	5000 lb		RQ 5000 lb final RQ
98-82-8			RQ 2270 kg final RQ
ETHYL BENZENE	1000 lb		RQ 1000 lb final RQ
100-41-4			RQ 454 kg final RQ

United States of America

California Prop. 65

WARNING! This product contains a chemical known in the State of California to cause cancer

Component	California Prop. 65
CUMENE (SKIN) - 98-82-8	Carcinogen
ETHYL BENZENE - 100-41-4	Carcinogen

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
METHYL N-AMYL KETONE 110-43-0	Х	X	X
N-BUTANOL (SKIN) 71-36-3	Х	X	X
1,2,4-TRIMETHYLBENZENE 95-63-6	Х	X	X
1,3,5-TRIMETHYLBENZENE 108-67-8		X	
DIETHYLBENZENE 25340-17-4	Х		
CUMENE (SKIN) 98-82-8	Х	X	X
ETHYL BENZENE 100-41-4	Х	X	X

16. OTHER INFORMATION

NFPA Health 2 Flammability 3 Instability 1 Physical hazard *
HMIS (Hazardous Health 2* Flammability 3 Reactivity 1

Material Information

System)

Prepared ByRevision Date
Tnemec Regulatory Dept: 816-474-3400 23-Jul-2015

Revision Summary 9 4 5 7 10 8 11 14

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of MSDS



Safety Data Sheet

Issue Date 22-Jul-2015 Revision Date 22-Jul-2015 Revision Number 7

1. IDENTIFICATION

Product identifier

Product Code F041-0062

Product Name THINNER CLEAR THINNER

Other means of identification

Common Name NO. 62 THINNER

UN/ID no. 1263

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Flammable Liquids	Category 2

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Causes skin irritation

Causes serious eye irritation

May cause respiratory irritation. May cause drowsiness or dizziness

May cause damage to organs through prolonged or repeated exposure

Highly flammable liquid and vapor



Appearance opaque Physical state liquid Odor aromatic

Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/mixing/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

Response

Get medical advice/attention if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

If skin irritation occurs: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

May be harmful if swallowed SEE SAFETY DATA SHEET

Acute Toxicity

86.187 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
P-CHLOROBENZOTRIFLUORIDE	98-56-6	60 - 100%
tert-BUTYL ACETATE	540-88-5	10 - 30%

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

eye irritation persists, consult a specialist.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If skin irritation persists, call a physician.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention immediately.

Ingestion Drink 1 or 2 glasses of water to dilute. Do not induce vomiting. Consult a physician or

poison control center IMMEDIATELY. Treat symptomatically.

Self-protection of the first aiderUse personal protective equipment. Avoid contact with eyes, skin and clothing.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

FLAMMABLE Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic

compounds. Carbon oxides. Hydrocarbons. Chlorine. Fluorine.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all

sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment Remove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

Methods for cleaning up

If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Close container after each use. Avoid contact with eyes, skin and clothing. Do not eat, drink

or smoke when using this product. If splashes are likely to occur, wear goggles. Wear protective gloves/clothing. Do not burn, or use a cutting torch on, the empty drum. When used in a mixture, read the labels and safety data sheets of all components. Wash

thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of

children.

Incompatible products Strong oxidizing agents. Strong acids. Alkaline. Nitrates.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
P-CHLOROBENZOTRIFLUORIDE	TWA: 2.5 mg/m ³	-	
98-56-6			
tert-BUTYL ACETATE	TWA: 200 ppm	TWA: 200 ppm	1500 ppm
540-88-5		TWA: 950 mg/m ³	

Appropriate engineering controls

Engineering measures Sufficient ventilation, in volume and pattern, should be provided through both local and

general exhaust to keep the air contaminant concentration below current applicable OSHA

Permissible Exposure Limits (PEL) and ACGIH"s Threshold Limit Values (TLV).

Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Use chemical resistant splash type goggles. If splashes are likely to occur, wear

face-shield.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

F041-0062 THINNER CLEAR THINNER

Physical state liquid

Appearance opaque Odor aromatic

Color No information available Odor threshold No information available

Property Remarks Values

No data available Melting point / freezing point

Literary Reference

Boiling point / boiling range 98 °C / 208 °F

Flash point 6 °C / 42 °F Pensky Martens - Closed Cup

Evaporation rate No data available Flammability (solid, gas) Not applicable Flammability Limit in Air No data available

Upper flammability limit N/A

Lower flammability limit 1.0

Vapor pressure No data available Vapor density No data available

Specific gravity 1.24652 a/cm3

Water solubility Insoluble in cold water

Solubility in other solvents No data available Partition coefficient: n-octanol/water No data available **Autoignition temperature** No data available **Decomposition temperature** No data available Kinematic viscosity No data available **Dynamic viscosity** No data available

Other Information

Density 10.39597 lbs/gal Volatile organic compounds (VOC) .000 lbs/gal

content

Total volatiles weight percent 100 % Total volatiles volume percent 100 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

Incompatible materials

Strong oxidizing agents, Strong acids, Alkaline, Nitrates

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact Causes serious eye damage.

Skin contact Irritating to skin.

Ingestion Harmful if swallowed.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
P-CHLOROBENZOTRIFLUORIDE 98-56-6	= 13 g/kg (Rat)	> 2 mL/kg(Rabbit)	= 33 mg/L (Rat)4 h
tert-BUTYL ACETATE 540-88-5	= 4100 mg/kg (Rat)	> 2 g/kg(Rabbit)	> 2230 mg/m³(Rat)4 h

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Irritating to eyes and skin.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity NOTICE: Reports have associated repeated and prolonged occupational overexposure to

solvents with permanent brain and nervous system damage. Intentional misuse by

deliberately concentrating and inhaling the contents may be harmful or fatal.

Sensitization No information available. **Mutagenicity** No information available.

Carcinogenicity There are no known carcinogenic chemicals in this product.

Reproductive effectsNo information available.

STOT - single exposureSkin, Eyes, Central Nervous System (CNS), Respiratory system
STOT - repeated exposure
Causes damage to organs through prolonged or repeated exposure

Target organ effects Central nervous system, Eyes, respiratory system, Skin, liver, kidney, Thyroid, blood,

thymus.

Aspiration hazard No information available.

Acute Toxicity 86.187 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

86.187 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

correr 70 or the mixture consists of compensately or armine wit hazarde to the aquate criminant			•
Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
P-CHLOROBENZOTRIFLUORIDE		11.5 - 15.8: 48 h Lepomis	3.68: 48 h Daphnia magna mg/L
98-56-6		macrochirus mg/L LC50 static	EC50
tert-BUTYL ACETATE		296 - 362: 96 h Pimephales	
540-88-5		promelas mg/L LC50 flow-through	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
P-CHLOROBENZOTRIFLUORIDE 98-56-6	3.7
tert-BUTYL ACETATE 540-88-5	1.38

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. TRANSPORT INFORMATION

DOT

UN/ID no. 1263

Proper Shipping Name Paint related material

Hazard Class 3
Packing Group II
Emergency Response Guide 128

Number

IATA

UN/ID no. 1263

Proper Shipping Name Paint related material

Hazard Class 3
Packing Group II
ERG Code 364

Additional information Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

Complies **TSCA** Complies DSL/NDSL Complies **EINECS/ELINCS** Complies **ENCS IECSC** Complies Complies **KECL PICCS** Complies Complies **AICS**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous

Categorization

Acute Health Hazard Yes
Chronic Health Hazard No
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
tert-BUTYL ACETATE 540-88-5				Х

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs	RQ
tert-BUTYL ACETATE	5000 lb		RQ 5000 lb final RQ
540-88-5			RQ 2270 kg final RQ

United States of America

California Prop. 65

This product does not contain any Proposition 65 chemicals

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
P-CHLOROBENZOTRIFLUORIDE 98-56-6	Х		Х
tert-BUTYL ACETATE 540-88-5	Х	X	Х

16. OTHER INFORMATION

NFPAHealth 2Flammability 3Instability 1Physical hazard -HMIS (HazardousHealth 2Flammability 3Reactivity 1

Material Information

System)

Prepared By Tnemec Regulatory Dept: 816-474-3400

Revision Date 22-Jul-2015

Revision Summary 9 4 5 7 10 8 11 14 15

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of MSDS



Safety Data Sheet

Issue Date 20-Jul-2015 Revision Date 20-Jul-2015 Revision Number 9

1. IDENTIFICATION

Product identifier

Product Code F041-0063 Product Name THINNER CLEAR

Other means of identification

Common Name NO. 63 THINNER

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious eye damage/eye irritation	Category 2B
Specific target organ toxicity (single exposure)	Category 3
Aspiration toxicity	Category 2
Flammable Liquids	Category 3

Label elements

EMERGENCY OVERVIEW

WARNING

Hazard statements

Causes eye irritation

May cause respiratory irritation. May cause drowsiness or dizziness

May be harmful if swallowed and enters airways

Flammable liquid and vapor



Appearance clear Physical state liquid Odor aromatic

Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/mixing/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Wear protective gloves/protective clothing/eye protection/face protection

Keep cool

Response

Get medical advice/attention if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

Toxic to aquatic life with long lasting effects

SEE SAFETY DATA SHEET

Acute Toxicity

12.11675 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
HEXYL ACETATE	142-92-7	60 - 100%
METHYL N-AMYL KETONE	110-43-0	1 - 10%
DIETHYLENE GLYCOL MONOBUTYL ETHER ACETATE	124-17-4	1 - 10%

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eve contact Flush immediately with large amounts of clean water under low pressure for at least 15

minutes. Consult a physician.

Skin contact Wash off immediately with soap and plenty of water.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention immediately.

Ingestion Aspiration hazard. If swallowed, do not induce vomiting. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical. Water spray.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

FLAMMABLE Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic

compounds. Carbon oxides. Hydrocarbons. Peroxides.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all

sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment Remove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

Methods for cleaning up

If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Avoid contact with eyes, skin and clothing. Handle in accordance with good industrial

hygiene and safety practice. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. When used in a mixture, read the labels

and safety data sheets of all components. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep away from heat, sparks and flame. Use only in an area containing flame proof

equipment. Prevent build-up of vapors by opening all windows and doors to achieve cross

ventilation. Keep out of the reach of children.

Incompatible products Strong oxidizing agents. Strong acids. Alkalis.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
METHYL N-AMYL KETONE	TWA: 50 ppm	TWA: 100 ppm	800 ppm
110-43-0		TWA: 465 mg/m ³	

Appropriate engineering controls

Engineering measures Sufficient ventilation, in volume and pattern, should be provided through both local and

general exhaust to keep the air contaminant concentration below current applicable OSHA

Permissible Exposure Limits (PEL) and ACGIH's Threshold Limit Values (TLV).

Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Safety glasses with side-shields If splashes are likely to occur, wear face-shield.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

Respiratory protectionUse only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state

liquid

AppearanceClearOdoraromatic

Color No information available Odor threshold No information available

No data available

PropertyValuesRemarkspHNo data available

Melting point / freezing point

Boiling point / boiling range 113 °C / 235 °F Flash point 57 °C / 134 °F

Flash point 57 °C / 134 °F Pensky Martens - Closed Cup Evaporation rate Pensky Martens - Closed Cup No data available

Flammability (solid, gas)

Flammability Limit in Air

No data available
No data available

Upper flammability limit N/A
Lower flammability limit 0.8

Vapor pressureNo data availableVapor densityNo data available

Specific gravity 0.87915 g/cm3

Water solubility Insoluble in cold water

Solubility in other solventsNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableKinematic viscosityNo data availableDynamic viscosityNo data available

Other Information

Density 7.31585 lbs/gal Volatile organic compounds (VOC) 6.41307 lbs/gal

content

Total volatiles weight percent 87.66 % Total volatiles volume percent 88.35 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents, Strong acids, Alkalis

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons. Peroxides.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact Irritating to eyes.

Skin contact Irritating to skin.

Ingestion

May be harmful if swallowed and enters airways. Potential for aspiration if swallowed. Aspiration may cause pulmonary edema and pneumonitis.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
HEXYL ACETATE 142-92-7	= 41500 μL/kg(Rat)	> 5 g/kg(Rabbit)	
METHYL N-AMYL KETONE 110-43-0	= 1600 mg/kg (Rat) = 1670 mg/kg (Rat)	= 12.6 mL/kg(Rabbit)= 12600 μL/kg(Rabbit)	> 2000 ppm (Rat)4 h
DIETHYLENE GLYCOL MONOBUTYL ETHER ACETATE 124-17-4	= 6500 mg/kg(Rat)	= 14500 mg/kg(Rabbit)	= 72500 mg/m³(Rat)4 h

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Irritating to eyes and skin.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity NOTICE: Reports have associated repeated and prolonged occupational overexposure to

solvents with permanent brain and nervous system damage. Intentional misuse by

deliberately concentrating and inhaling the contents may be harmful or fatal.

SensitizationNo information available.MutagenicityNo information available.

Carcinogenicity There are no known carcinogenic chemicals in this product.

Reproductive effects No information available.

STOT - single exposure Skin, Eyes, Central Nervous System (CNS), Respiratory system, Peripheral Nervous

System (PNS)

STOT - repeated exposure No information available

Aspiration hazard May be harmful if swallowed and enters airways.

Acute Toxicity 12.11675 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

0.71904 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
HEXYL ACETATE 142-92-7		3.7 - 4.4: 96 h Pimephales promelas mg/L LC50 flow-through	
METHYL N-AMYL KETONE		126 - 137: 96 h Pimephales	
110-43-0		promelas mg/L LC50 flow-through	
DIETHYLENE GLYCOL		77: 96 h Pimephales promelas mg/L	665: 48 h Daphnia magna mg/L
MONOBUTYL ETHER ACETATE		LC50 static 50 - 70: 96 h	LC50
124-17-4		Brachydanio rerio mg/L LC50 static	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
METHYL N-AMYL KETONE	1.98
110-43-0	
DIETHYLENE GLYCOL MONOBUTYL ETHER ACETATE	1.77
124-17-4	

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Empty containers should be taken to an approved waste handling site for recycling or Contaminated packaging

disposal.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Paint related material

IATA

UN/ID no. 1263

Proper Shipping Name Paint related material

Hazard Class Packing Group Ш **ERG Code** 366

Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes Additional information

of Transportation.

15. REGULATORY INFORMATION

International Inventories

Complies **TSCA DSL/NDSL** Complies **EINECS/ELINCS** Complies **ENCS** Does not comply Complies **IECSC KECL** Does not comply **PICCS** Does not comply **AICS** Does not comply

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61): **HAPS Data**

Component

DIETHYLENE GLYCOL MONOBUTYL ETHER ACETATE

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

Component	SARA 313 - Threshold Values
DIETHYLENE GLYCOL MONOBUTYL ETHER ACETATE - 124-17-4	1.0

SARA 311/312 Hazardous

Categorization

Acute Health Hazard Yes
Chronic Health Hazard No
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

CERCLA

United States of America

California Prop. 65

This product does not contain any Proposition 65 chemicals

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
METHYL N-AMYL KETONE	X	X	X
110-43-0			
DIETHYLENE GLYCOL	X		X
MONOBUTYL ETHER ACETATE			
124-17-4			

16. OTHER INFORMATION

NFPA Health 2 Flammability 2 Instability 1 Physical hazard *

HMIS (Hazardous Health 2 Flammability 2 Reactivity 1

Material Information

System)

Prepared By Tnemec Regulatory Dept: 816-474-3400

Revision Date 20-Jul-2015

Revision Summary 9 4 5 7 10 8 11 14 15

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot quarantee that these are the only hazards which exist.

End of MSDS

TNEMEC

Safety Data Sheet

Issue Date 16-Jul-2015 Revision Date 16-Jul-2015 Revision Number 7

1. IDENTIFICATION

Product identifier

Product Code F041-0065 Product Name THINNER CLEAR

Other means of identification

Common Name NO. 65 THINNER

UN/ID no. 1263

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Dermal	Category 4
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Aspiration toxicity	Category 2
Flammable Liquids	Category 2

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Harmful in contact with skin Causes serious eye irritation

May cause respiratory irritation. May cause drowsiness or dizziness

May be harmful if swallowed and enters airways

Highly flammable liquid and vapor



Appearance opaque Physical state liquid Odor aromatic

Precautionary Statements

Prevention

Wear protective gloves/protective clothing/eve protection/face protection

Wash face, hands and any exposed skin thoroughly after handling

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/mixing/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

Response

Get medical advice/attention if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

Call a POISON CENTER or doctor/physician if you feel unwell

Wash contaminated clothing before reuse

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

May be harmful if swallowed SEE SAFETY DATA SHEET

Acute Toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
tert-BUTYL ACETATE	540-88-5	60 - 100%

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

symptoms persist, call a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If skin irritation persists, call a physician.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention immediately.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Water. Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic

compounds. Carbon oxides. Hydrocarbons.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all

sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containmentRemove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

Methods for cleaning up

If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Close container after each use. Avoid contact with eyes, skin and clothing. Do not eat, drink

or smoke when using this product. If splashes are likely to occur, wear goggles. Wear protective gloves/clothing. Do not burn, or use a cutting torch on, the empty drum. When used in a mixture, read the labels and safety data sheets of all components. Wash

thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of

children.

Incompatible products Strong oxidizing agents. Acids. Alkaline. Nitrates.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
tert-BUTYL ACETATE 540-88-5	TWA: 200 ppm	TWA: 200 ppm TWA: 950 mg/m³	1500 ppm

Appropriate engineering controls

Engineering measures Sufficient ventilation, in volume and pattern, should be provided through both local and

general exhaust to keep the air contaminant concentration below current applicable OSHA Permissible Exposure Limits (PEL) and ACGIH's Threshold Limit Values (TLV).

Appropriate ventilation should be employed to remove hazardous decomposition products

formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Use chemical resistant splash type goggles.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

Appearance opaque Odor aromatic

Color No information available Odor threshold No information available

Property Values Remarks

pH No data available

Melting point / freezing point

No data available
No data available

Boiling point / boiling range $98 \, ^{\circ}\text{C} \, / \, 208 \, ^{\circ}\text{F}$

Flash point 16 °C / 60 °F Pensky Martens - Closed Cup

Evaporation rateNo data availableFlammability (solid, gas)Not applicableFlammability Limit in AirNo data available

Upper flammability limit N/A
Lower flammability limit 1.0

Vapor pressureNo data availableVapor densityNo data available

Specific gravity 0.86091 g/cm3

Water solubility Insoluble in cold water

Solubility in other solventsNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableKinematic viscosityNo data availableDynamic viscosityNo data available

Other Information

Density 7.17999 lbs/gal Volatile organic compounds (VOC) .000 lbs/gal

content

Total volatiles weight percent
Total volatiles volume percent
100 %
100 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents, Acids, Alkaline, Nitrates

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact Causes serious eye damage.

Skin contact Harmful in contact with skin.

Ingestion Harmful if swallowed. Potential for aspiration if swallowed. Aspiration may cause pulmonary

edema and pneumonitis.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
tert-BUTYL ACETATE	= 4100 mg/kg (Rat)	> 2 g/kg (Rabbit)	> 2230 mg/m³ (Rat) 4 h
540-88-5			

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Irritating to eyes and skin.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic ToxicityAvoid repeated exposure.SensitizationNo information available.MutagenicityNo information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Reproductive effectsNo information available.

STOT - single exposure Skin, Eyes, Central Nervous System (CNS)

STOT - repeated exposure No information available

Aspiration hazard Risk of serious damage to the lungs (by aspiration).

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
tert-BUTYL ACETATE		296 - 362: 96 h Pimephales	
540-88-5		promelas mg/L LC50 flow-through	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
tert-BUTYL ACETATE	1.38
540-88-5	

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. TRANSPORT INFORMATION

DOT

UN/ID no. 1263

Proper Shipping Name Paint related material

Hazard Class 3
Packing Group || |
Emergency Response Guide 128

Number

IATA

UN/ID no. 1263

Proper Shipping Name Paint related material

Hazard Class 3
Packing Group II
ERG Code 366

Additional information Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA Complies **DSL/NDSL** Complies **EINECS/ELINCS** Complies Complies **ENCS** Complies **IECSC** Complies **KECL** Complies **PICCS** Complies **AICS**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous

Categorization

Acute Health Hazard
Chronic Health Hazard
No
Fire Hazard
Sudden Release of Pressure Hazard
No
Reactive Hazard
No

Component	CWA - Reportable	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous
	Quantities		-	Substances

tert-BUTYL ACETATE		X
540-88-5		

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs	RQ
tert-BUTYL ACETATE	5000 lb		RQ 5000 lb final RQ
540-88-5			RQ 2270 kg final RQ

United States of America

California Prop. 65

This product does not contain any Proposition 65 chemicals

California SCAQMD Rule 443

Does Not Contain Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
tert-BUTYL ACETATE	X	X	X
540-88-5			

16. OTHER INFORMATION

NFPA
HMIS (Hazardous

Health 1 Health 1 Flammability 3 Flammability 3

Instability 0 Reactivity 0 Physical hazard -

Material Information

System)

Prepared By Revision Date Revision Summary 9 4 5 7 10 8 11 14 15 Tnemec Regulatory Dept: 816-474-3400

16-Jul-2015

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

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End of MSDS



Safety Data Sheet

Issue Date 16-Jul-2015 Revision Date 16-Jul-2015 Revision Number 6

1. IDENTIFICATION

Product identifier

Product Code F041-0066

Product Name THINNER TEXANOL THINNER

Other means of identification

Common Name NO. 66 THINNER

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious eye damage/eye irritation	Category 2
Aspiration toxicity	Category 2

Label elements

EMERGENCY OVERVIEW

WARNING

Hazard statements

Causes serious eye irritation

May be harmful if swallowed and enters airways



Appearance opaque Physical state liquid Odor aromatic

Precautionary Statements

•

Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection

Response

Get medical advice/attention if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

Storage

Store locked up Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

May be harmful if swallowed May be harmful if inhaled Harmful to aquatic life with long lasting effects

SEE SAFETY DATA SHEET

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
2,2,4-TRIMETHYL-1,3-PENTANEDIOL	25265-77-4	60 - 100%
MONOISOBUTYRATE		

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes. Rinse immediately with plenty

of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a

physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If skin irritation persists, call a physician.

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is Inhalation

difficult, give oxygen. Get medical attention immediately.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately.

Self-protection of the first aider Use personal protective equipment. Avoid contact with eyes, skin and clothing.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic

compounds. Carbon oxides. Hydrocarbons.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all

sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containmentRemove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

Methods for cleaning up If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated

absorbent, container and unused contents in accordance with local, state and federal

regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Close container after each use. Avoid contact with eyes, skin and clothing. Do not eat, drink

or smoke when using this product. If splashes are likely to occur, wear goggles. Wear protective gloves/clothing. Do not burn, or use a cutting torch on, the empty drum. When used in a mixture, read the labels and safety data sheets of all components. Wash

thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of

children.

Incompatible products Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Appropriate engineering controls

Engineering measures Sufficient ventilation, in volume and pattern, should be provided through both local and

general exhaust to keep the air contaminant concentration below current applicable OSHA

Permissible Exposure Limits (PEL) and ACGIH's Threshold Limit Values (TLV).

Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Use chemical resistant splash type goggles.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

Respiratory protection Use only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh

> air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

Appearance opaque Odor aromatic

Color No information available Odor threshold No information available

Property Values Remarks pН No data available

Melting point / freezing point No data available 254 °C / 490 °F Boiling point / boiling range

Flash point 120 °C / 248 °F Pensky Martens - Closed Cup

Evaporation rate No data available Flammability (solid, gas) Not applicable Flammability Limit in Air No data available

Upper flammability limit N/A

Lower flammability limit 1.0 Vapor pressure No data available

Vapor density No data available 0.94724 a/cm3

Specific gravity

Water solubility Insoluble in cold water

Solubility in other solvents No data available Partition coefficient: n-octanol/water No data available **Autoignition temperature** No data available **Decomposition temperature** No data available

Kinematic viscosity No data available

Dynamic viscosity 13.5 mPas approx

Other Information

7.90002 lbs/gal Density Volatile organic compounds (VOC) 7.90002 lbs/gal

content

Total volatiles weight percent 100 % Total volatiles volume percent 100 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation Aspiration into lungs can produce severe lung damage.

Eye contact Causes serious eye irritation.

Skin contact CAUSES SKIN IRRITATION.

Ingestion Harmful if swallowed. Potential for aspiration if swallowed. Aspiration may cause pulmonary

edema and pneumonitis.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
2,2,4-TRIMETHYL-1,3-PENTANEDI OL MONOISOBUTYRATE 25265-77-4	= 3200 mg/kg (Rat)	> 15200 mg/kg(Rat)	

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Irritating to eyes and skin.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity NOTICE: Reports have associated repeated and prolonged occupational overexposure to

solvents with permanent brain and nervous system damage. Intentional misuse by

deliberately concentrating and inhaling the contents may be harmful or fatal.

Sensitization No information available.

Mutagenicity No information available.

Carcinogenicity There are no known carcinogenic chemicals in this product.

Reproductive effects
STOT - single exposure
STOT - repeated exposure
No information available
No information available

Aspiration hazard Risk of serious damage to the lungs (by aspiration).

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects

0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
2,2,4-TRIMETHYL-1,3-PENTANEDI OL MONOISOBUTYRATE	18.4: 72 h Pseudokirchneriella subcapitata mg/L EC50	30: 96 h Pimephales promelas mg/L LC50	95: 96 h Daphnia magna mg/L LC50
25265-77-4	Subcapitata mg/L EC50	LC30	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE	3.47
25265-77-4	

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Paint related material

<u>IATA</u>

Proper Shipping Name Not regulated

Additional information Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA Complies **DSL/NDSL** Complies **EINECS/ELINCS** Complies **ENCS** Complies **IECSC** Complies Complies **KECL** Complies **PICCS** Complies **AICS**

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TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous

Categorization

Acute Health HazardYesChronic Health HazardNoFire HazardNoSudden Release of Pressure HazardNoReactive HazardNo

CERCLA

United States of America

California Prop. 65

This product does not contain any Proposition 65 chemicals

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

16. OTHER INFORMATION

NFPA Health 1 Flammability 1 Instability 0 Physical hazard -

HMIS (Hazardous Health 1 Flammability 1 Reactivity 0

Material Information

System)

Prepared By Tnemec Regulatory Dept: 816-474-3400

Revision Date 16-Jul-2015

Revision Summary 9 4 5 7 10 8 11 14 15

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of MSDS

TNEMEC

Safety Data Sheet

Issue Date 16-Jul-2015 Revision Date 16-Jul-2015 Revision Number 7

1. IDENTIFICATION

Product identifier

Product Code F041-0068
Product Name THINNER CLEAR

Other means of identification

Common Name NO. 68 THINNER

UN/ID no. 1231

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised againstConsumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Aspiration toxicity	Category 2
Flammable Liquids	Category 2

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Causes skin irritation

Causes serious eye irritation

May cause drowsiness or dizziness

May be harmful if swallowed and enters airways

Highly flammable liquid and vapor



Appearance opaque Physical state liquid Odor aromatic

Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/mixing/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

Response

Get medical advice/attention if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

If skin irritation occurs: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

May be harmful if swallowed SEE SAFETY DATA SHEET

Acute Toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
METHYL ACETATE	79-20-9	60 - 100%

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eve contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

symptoms persist, call a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If skin irritation persists, call a physician.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention immediately.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Water.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic

compounds. Carbon oxides. Hydrocarbons.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all

sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containmentRemove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

Methods for cleaning up

If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling

Close container after each use. Avoid contact with eyes, skin and clothing. Do not eat, drink or smoke when using this product. If splashes are likely to occur, wear goggles. Wear protective gloves/clothing. Do not burn, or use a cutting torch on, the empty drum. When used in a mixture, read the labels and safety data sheets of all components. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Vapors may ignite explosively. Keep away from heat, sparks and flame. VAPORS MAY

CAUSE FLASH FIRE. Use only in an area containing flame proof equipment. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Prevent build-up of vapors by opening all

windows and doors to achieve cross ventilation.

Incompatible products Peroxides. Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
METHYL ACETATE 79-20-9	TWA: 200 ppm STEL: 250 ppm	TWA: 200 ppm TWA: 610 mg/m³ STEL: 250 ppm STEL: 760 mg/m³	3100 ppm

Appropriate engineering controls

Engineering measures Sufficient ventilation, in volume and pattern, should be provided through both local and

general exhaust to keep the air contaminant concentration below current applicable OSHA Permissible Exposure Limits (PEL) and ACGIH"s Threshold Limit Values (TLV).

Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Use chemical resistant splash type goggles.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

Appearance opaque Odor aromatic

Color No information available **Odor threshold** No information available

Property Remarks Values

No data available Melting point / freezing point

No data available

72 °C / 162 °F Boiling point / boiling range

Flash point -10 °C / 14 °F Pensky Martens - Closed Cup

Evaporation rate No data available Flammability (solid, gas) Not applicable

Flammability Limit in Air No data available

Upper flammability limit N/A Lower flammability limit 1.0

Vapor pressure No data available Vapor density No data available

Specific gravity 0.92926 a/cm3

Water solubility Insoluble in cold water

Solubility in other solvents No data available Partition coefficient: n-octanol/water No data available **Autoignition temperature** No data available **Decomposition temperature** No data available Kinematic viscosity No data available No data available **Dynamic viscosity**

Other Information

7.75002 lbs/gal Density Volatile organic compounds (VOC) .000 lbs/gal

content

Total volatiles weight percent 100 % Total volatiles volume percent 100 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Peroxides, Strong oxidizing agents

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact Causes serious eye irritation.

Skin contact CAUSES SKIN IRRITATION.

Ingestion Harmful if swallowed. Potential for aspiration if swallowed. Aspiration may cause pulmonary

edema and pneumonitis.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
METHYL ACETATE 79-20-9	> 5000 mg/kg (Rat)	> 5 g/kg(Rabbit)	= 16000 ppm (Rat) 4 h

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Irritating to eyes and skin.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity NOTICE: Reports have associated repeated and prolonged occupational overexposure to

solvents with permanent brain and nervous system damage. Intentional misuse by

deliberately concentrating and inhaling the contents may be harmful or fatal.

Sensitization No information available.

Mutagenicity No information available.

Carcinogenicity There are no known carcinogenic chemicals in this product.

Reproductive effects No information available.

STOT - single exposure Skin, Eyes, Central Nervous System (CNS)

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure

Target organ effects blood, Central nervous system, Central Vascular System (CVS), Gastrointestinal tract, liver,

respiratory system, Skin.

Aspiration hazard Risk of serious damage to the lungs (by aspiration).

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
METHYL ACETATE 79-20-9	120: 72 h Desmodesmus subspicatus mg/L EC50	295 - 348: 96 h Pimephales promelas mg/L LC50 flow-through 250 - 350: 96 h Brachydanio rerio mg/L LC50 static	1026.7: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
METHYL ACETATE	0.18
79-20-9	

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

F041-0068 THINNER CLEAR

Revision Date 16-Jul-2015

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

Component	CAWAST
METHYL ACETATE	Toxic
79-20-9	Ignitable

14. TRANSPORT INFORMATION

DOT

UN/ID no. 1231

Proper Shipping Name Methyl Acetate

Hazard Class 3
Packing Group || |
Emergency Response Guide 129

Number

IATA

UN/ID no. 1231

Proper Shipping Name Methyl Acetate

Hazard Class 3
Packing Group II
ERG Code 364

<u>Additional information</u> Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA Complies **DSL/NDSL** Complies **EINECS/ELINCS** Complies Complies **ENCS IECSC** Complies Complies **KECL** Complies **PICCS** Complies **AICS**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous

Categorization

Acute Health Hazard Yes
Chronic Health Hazard No
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

CERCLA

United States of America

California Prop. 65

This product does not contain any Proposition 65 chemicals

California SCAQMD Rule 443

Does Not Contain Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
METHYL ACETATE	X	X	X
79-20-9			

16. OTHER INFORMATION

NFPA Health 1 Flammability 3 Instability 1 Physical hazard - HMIS (Hazardous Health 1 Flammability 3 Reactivity 1

HMIS (Hazardous Material Information

System)

Prepared By Tnemec Regulatory Dept: 816-474-3400

Revision Date 16-Jul-2015

Revision Summary 9 4 5 7 10 8 11 14 15

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of MSDS



Safety Data Sheet

Issue Date 16-Jul-2015 Revision Date 16-Jul-2015 Revision Number 7

1. IDENTIFICATION

Product identifier

Product Code F041-0072 Product Name THINNER CLEAR

Other means of identification

Common Name NO. 72 THINNER

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Specific target organ toxicity (single exposure)	Category 3
Aspiration toxicity	Category 2
Flammable Liquids	Category 4

Label elements

EMERGENCY OVERVIEW

WARNING

Hazard statements

May cause respiratory irritation. May cause drowsiness or dizziness

May be harmful if swallowed and enters airways

Combustible liquid



Appearance opaque Physical state liquid Odor aromatic

Precautionary Statements

Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Wear protective gloves/protective clothing/eye protection/face protection
Keep cool

Response

Get medical advice/attention if you feel unwell

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store locked up Store in a well-ventilated place. Keep container tightly closed Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

May be harmful in contact with skin SEE SAFETY DATA SHEET

Acute Toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
DIPROPYLENE GLYCOL MONOMETHYL ETHER	88917-22-0	60 - 100%
ACETATE		

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

symptoms persist, call a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If symptoms persist, call a physician.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention immediately.

Ingestion Aspiration hazard. If swallowed, do not induce vomiting. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Dry chemical. Foam. Water spray.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

FLAMMABLE Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic

compounds. Carbon oxides. Hydrocarbons.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all

sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containmentRemove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

absorbent, container and unused contents in accordance with local, state and federal

regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Close container after each use. Avoid contact with eyes, skin and clothing. Do not eat, drink

or smoke when using this product. If splashes are likely to occur, wear goggles. Wear protective gloves/clothing. Do not burn, or use a cutting torch on, the empty drum. When used in a mixture, read the labels and safety data sheets of all components. Wash

thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep away from heat, sparks and flame. Use only in an area containing flame proof

equipment. Prevent build-up of vapors by opening all windows and doors to achieve cross

ventilation.

Incompatible products Incompatible with strong acids and bases. Oxygen. Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Appropriate engineering controls

Engineering measuresSufficient ventilation, in volume and pattern, should be provided through both local and

general exhaust to keep the air contaminant concentration below current applicable OSHA

Permissible Exposure Limits (PEL) and ACGIH"s Threshold Limit Values (TLV).

Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eve/face protection Safety glasses with side-shields

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

Respiratory protectionUse only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

AppearanceopaqueOdoraromatic

Color No information available Odor threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks</u>

pH No data available
Melting point / freezing point No data available

Boiling point / boiling range 209 °C / 408 °F

Flash point 85 °C / 185 °F Pensky Martens - Closed Cup

Evaporation rateNo data availableFlammability (solid, gas)Not applicableFlammability Limit in AirNo data available

Upper flammability limit N/A
Lower flammability limit 1.0

Vapor pressureNo data availableVapor densityNo data available

Specific gravity .97578 g/cm3

Water solubility Insoluble in cold water

Solubility in other solventsNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableKinematic viscosityNo data availableDynamic viscosityNo data available

Other Information

Density 8.11998 lbs/gal Volatile organic compounds (VOC) 8.120 lbs/gal

content

Total volatiles weight percent 100.0000 % Total volatiles volume percent 100.0000 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Incompatible with strong acids and bases, Oxygen, Strong oxidizing agents

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact Irritating to eyes.

Skin contact Irritating to skin.

Ingestion May be harmful if swallowed and enters airways. Potential for aspiration if swallowed.

Aspiration may cause pulmonary edema and pneumonitis.

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Skin disorders.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

F041-0072 THINNER CLEAR

Revision Date 16-Jul-2015

Chronic Toxicity NOTICE: Reports have associated repeated and prolonged occupational overexposure to

solvents with permanent brain and nervous system damage. Intentional misuse by

deliberately concentrating and inhaling the contents may be harmful or fatal.

SensitizationNo information available.MutagenicityNo information available.

Carcinogenicity There are no known carcinogenic chemicals in this product.

Reproductive effects
STOT - single exposure
No information available.
Central Nervous System (CNS)

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure

Aspiration hazard May be harmful if swallowed and enters airways. Risk of serious damage to the lungs (by

aspiration).

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

100 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Paint related material

IATA

Proper Shipping Name Paint related material, Not regulated

Additional information Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

Complies **TSCA** DSL/NDSL Complies **EINECS/ELINCS** Complies Complies **ENCS IECSC** Complies Complies **KECL PICCS** Complies **AICS** Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

SARA 311/312 Hazardous

Categorization

Acute Health Hazard Yes
Chronic Health Hazard No
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

CERCLA

United States of America

California Prop. 65

This product does not contain any Proposition 65 chemicals

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

16. OTHER INFORMATION

NFPA Health 1 Flammability 1 Instability 0 Physical hazard *
HMIS (Hazardous Health 1 Flammability 1 Reactivity 0

HMIS (Hazardous Material Information

System)

Prepared By Tnemec Regulatory Dept: 816-474-3400 Revision Date 16-Jul-2015

Revision Date Revision Summary

9 4 5 7 10 8 11 14 15

F041-0072 THINNER CLEAR

Revision Date 16-Jul-2015

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of MSDS



Safety Data Sheet

Issue Date No data available Revision Date 07-Jan-2015 Revision Number 5

1. IDENTIFICATION

Product identifier

Product Code F041-0073
Product Name THINNER CLEAR

Other means of identification

Common Name NO. 73 THINNER

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable Liquids Category 3

Label elements

EMERGENCY OVERVIEW

WARNING

Flammable liquid and vapor



Appearance Colorless Physical state liquid Odor Slight

Precautionary Statements

F041-0073 THINNER CLEAR

Prevention

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/mixing/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Wear protective gloves/protective clothing/eye protection/face protection

Response

Get medical advice/attention if you feel unwell

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store in a well-ventilated place. Keep cool Store locked up

Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

May be harmful if swallowed Harmful to aquatic life with long lasting effects

SEE SAFETY DATA SHEET

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component		CAS-No	Weight-%
ETHYL 3-ETHOXYPROP	IONATE	763-69-9	60 - 100%

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

symptoms persist, call a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If symptoms persist, call a physician.

Inhalation Remove to fresh air. Oxygen or artificial respiration if needed.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately.

Self-protection of the first aider Use personal protective equipment. Avoid contact with eyes, skin and clothing.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water spray. Carbon dioxide (CO2). Dry chemical. Foam.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

FLAMMABLE Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and

inorganic compounds. Carbon dioxide (CO2). Hydrocarbons. Peroxides.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all

sources of ignition.

Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or **Environmental precautions**

sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment Remove all sources of ignition. Spills may be collected with inert, absorbent material for

> proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

Methods for cleaning up If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated

absorbent, container and unused contents in accordance with local, state and federal

regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Close container after each use. Avoid contact with eyes, skin and clothing. Handle in

accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. When used in a mixture, read the labels and safety data sheets of all components. Wash

thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep away from heat, sparks and flame. Use only in an area containing flame proof

equipment. Prevent build-up of vapors by opening all windows and doors to achieve cross

ventilation.

Incompatible products Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Appropriate engineering controls

Sufficient ventilation, in volume and pattern, should be provided through both local and **Engineering measures**

general exhaust to keep the air contaminant concentration below current applicable OSHA

Permissible Exposure Limits (PEL) and ACGIH's Threshold Limit Values (TLV).

Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Safety glasses with side-shields

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, Skin and body protection

as appropriate, to prevent skin contact.

Use only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh Respiratory protection

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

No data available

after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liauid Colorless

Appearance Odor Sliaht

Color No information available Odor threshold No information available

Property Values Remarks

No data available На

No data available Melting point / freezing point 164 °C / 328.0 °F

Boiling point / boiling range 61 °C / 142.0 °F Flash point Pensky Martens - Closed Cup

Evaporation rate No data available

Flammability (solid, gas) No information available Flammability Limit in Air No data available

Upper flammability limit N/A

Lower flammability limit 1.0% Vapor pressure No data available

Vapor density No data available

Specific gravity .95055 g/cm3

Water solubility Insoluble in cold water Solubility in other solvents

No data available Partition coefficient: n-octanol/water No data available No data available **Autoignition temperature**

Decomposition temperature 1.328 mm2/s Kinematic viscosity

1.20 mPas Dynamic viscosity

Other Information

Density 7.91002 lbs/gal Volatile organic compounds (VOC) 7.910 lbs/gal

content

Total volatiles weight percent 100.0000 %

Total volatiles volume percent 100.0000 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Possibility of hazardous reactions.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Peroxides. Carbon dioxide (CO2). Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact Irritating to eyes.

Skin contact Irritating to skin.

Ingestion Harmful if swallowed.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
ETHYL 3-ETHOXYPROPIONATE 763-69-9	= 3200 mg/kg (Rat)	= 10 mL/kg(Rabbit)	

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Skin disorders.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity NOTICE: Reports have associated repeated and prolonged occupational overexposure to

solvents with permanent brain and nervous system damage. Intentional misuse by

deliberately concentrating and inhaling the contents may be harmful or fatal.

Sensitization No information available.

Mutagenicity No information available.

Carcinogenicity There are no known carcinogenic chemicals in this product.

Reproductive effects
STOT - single exposure
STOT - repeated exposure
No information available
No information available
No information available

Aspiration hazard Based on product level data, this product does not meet the requirement to be classified as

an aspiration hazard. However, this product contains an ingredient that may cause

aspiration if swallowed.

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects

0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
ETHYL 3-ETHOXYPROPIONATE		62: 96 h Pimephales promelas mg/L	970: 48 h Daphnia magna mg/L
763-69-9		LC50 static	EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
ETHYL 3-ETHOXYPROPIONATE	1.35
763-69-9	

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Paint related material

<u>IATA</u>

Proper Shipping Name Not regulated

Additional information Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

International Inventories TSCA TSCA

DSL/NDSL Complies
EINECS/ELINCS Complies
ENCS Complies
IECSC Complies
KECL Complies
PICCS Complies
AICS Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous

Categorization

Acute Health HazardYesChronic Health HazardNoFire HazardYesSudden Release of Pressure HazardNoReactive HazardNo

CERCLA

United States of America

California Prop. 65

This product does not contain any Proposition 65 chemicals

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

16. OTHER INFORMATION

NFPA Health 1 Flammability 2 Instability 1 Physical hazard -

HMIS (Hazardous Health 1 Flammability 2 Reactivity 1

Material Information

System)

Prepared By Tnemec Regulatory Dept: 816-474-3400

Revision Date 07-Jan-2015

Revision Summary 9 4 5 7 10 11 14 15

Disclaimer

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To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of MSDS

TNEMEC

Safety Data Sheet

Issue Date 28-Jul-2015 Revision Date 28-Jul-2015 Revision Number 6

1. IDENTIFICATION

Product identifier

Product Code F041-0074
Product Name THINNER CLEAR

Other means of identification

Common Name NO. 74 THINNER

UN/ID no. 1263

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3
Aspiration toxicity	Category 2
Flammable Liquids	Category 2

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Causes skin irritation

Causes serious eye irritation

May cause drowsiness or dizziness

May be harmful if swallowed and enters airways

Highly flammable liquid and vapor



Appearance Colorless

Physical state liquid

Odor aromatic

Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/mixing/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

Response

Get medical advice/attention if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

If skin irritation occurs: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

SEE SAFETY DATA SHEET

Acute Toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
ACETONE	67-64-1	60 - 100%
METHYL ACETATE	79-20-9	10 - 30%

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

symptoms persist, call a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If symptoms persist, call a physician.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention immediately.

Ingestion Aspiration hazard. If swallowed, do not induce vomiting. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

alcohol-resistant foam. Dry chemical. Carbon dioxide. Water spray.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

FLAMMABLE Flash back possible over considerable distance Keep product and empty container away from heat and sources of ignition Thermal decomposition can lead to release of irritating gases and vapours

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic

compounds. Carbon oxides. Hydrocarbons.

Sensitivity to Static Discharge yes.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use water spray to cool unopened containers. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protective equipment. Avoid contact with eyes,

skin and clothing. Remove all sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate

ground water system.

Methods and material for containment and cleaning up

Methods for containmentRemove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder,

sawdust).

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Close container after each use. Ensure adequate ventilation. Avoid contact with eyes, skin

and clothing. Do not eat, drink or smoke when using this product. Wear personal protective equipment. Keep away from open flames, hot surfaces and sources of ignition. Do not burn, or use a cutting torch on, the empty drum. Do not breathe vapours or spray mist. Wash

thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Vapors may ignite explosively. Keep away from heat, sparks and flame. VAPORS MAY

CAUSE FLASH FIRE. Use only in an area containing flame proof equipment. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Prevent build-up of vapors by opening all

windows and doors to achieve cross ventilation. Keep out of the reach of children.

Incompatible products Peroxides. Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
ACETONE 67-64-1	TWA: 500 ppm STEL: 750 ppm	TWA: 750 ppm TWA: 1800 mg/m³ STEL: 2400 mg/m³ STEL: 1000 ppm TWA: 1000 ppm TWA: 2400 mg/m³	2500 ppm
METHYL ACETATE 79-20-9	TWA: 200 ppm STEL: 250 ppm	TWA: 200 ppm TWA: 610 mg/m³ STEL: 250 ppm STEL: 760 mg/m³	3100 ppm

Appropriate engineering controls

Engineering measures Sufficient ventilation, in volume and pattern, should be provided through both local and

general exhaust to keep the air contaminant concentration below current applicable OSHA Permissible Exposure Limits (PEL) and ACGIH's Threshold Limit Values (TLV).

Appropriate ventilation should be employed to remove hazardous decomposition products

formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Use chemical resistant splash type goggles.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

Respiratory protectionUse only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

AppearanceColorlessOdoraromatic

Color No information available Odor threshold No information available

Property Values Remarks

pH No data available

Melting point / freezing point No data available

Boiling point / boiling range >= 56 °C / 133 °F Flash point ?- 17 °C / 1.0 °F

Flash point .? - 17 °C / 1.0 °F Pensky Martens - Closed Cup

Evaporation rateNo data availableFlammability (solid, gas)Not applicableFlammability Limit in AirNo data available

Upper flammability limit N/A
Lower flammability limit 1.0

Vapor pressureNo data availableVapor densityNo data available

Specific gravity 0.81980 g/cm3

Water solubility Insoluble in cold water

Solubility in other solventsNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data available

Decomposition temperatureNo data availableKinematic viscosityNo data availableDynamic viscosityNo data available

Other Information

Density 6.822 lbs/gal
Total volatiles weight percent 100 %
Total volatiles volume percent 100 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Peroxides, Strong oxidizing agents

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons. Methanol. acetic acid.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact Causes serious eye damage.

Skin contact Irritating to skin. Prolonged contact may cause redness and irritation.

Ingestion May be harmful if swallowed and enters airways. Potential for aspiration if swallowed.

Aspiration may cause pulmonary edema and pneumonitis.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
ACETONE 67-64-1	= 5800 mg/kg (Rat)		= 50100 mg/m³(Rat)8 h
METHYL ACETATE 79-20-9	> 5000 mg/kg (Rat)	> 5 g/kg(Rabbit)	= 16000 ppm (Rat) 4 h

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Skin disorders.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity NOTICE: Reports have associated repeated and prolonged occupational overexposure to

solvents with permanent brain and nervous system damage. Intentional misuse by

deliberately concentrating and inhaling the contents may be harmful or fatal.

Sensitization No information available.

Mutagenicity No information available.

Carcinogenicity There are no known carcinogenic chemicals in this product.

Reproductive effects No information available.

STOT - single exposure Skin, Eyes, Central Nervous System (CNS)

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure, liver, kidney, Blood,

Central Nervous System (CNS)

Target organ effects Central nervous system, respiratory system, Skin.

Aspiration hazard May be harmful if swallowed and enters airways. Risk of serious damage to the lungs (by

aspiration).

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

	70 of the mixture consists of compensations (c) of annatomic mazaras to the adjustic comment			
	Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
Γ	ACETONE		4.74 - 6.33: 96 h Oncorhynchus	12600 - 12700: 48 h Daphnia
1	67-64-1		mykiss mL/L LC50 8300: 96 h	magna mg/L EC50 10294 - 17704:
1			Lepomis macrochirus mg/L LC50	48 h Daphnia magna mg/L EC50
1			6210 - 8120: 96 h Pimephales	Static
			promelas mg/L LC50 static	

METHYL ACETATE 79-20-9	120: 72 h Desmodesmus subspicatus mg/L EC50	295 - 348: 96 h Pimephales promelas mg/L LC50 flow-through	1026.7: 48 h Daphnia magna mg/L EC50
		250 - 350: 96 h Brachydanio rerio	
		mg/L LC50 static	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
ACETONE	-0.24
67-64-1	
METHYL ACETATE	0.18
79-20-9	

Other Adverse Effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

Component	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
ACETONE		Included in waste stream:		U002
67-64-1		F039		

Component	CAWAST
ACETONE 67-64-1	Ignitable
METHYL ACETATE 79-20-9	Toxic Ignitable

14. TRANSPORT INFORMATION

DOT

UN/ID no. 1263

Proper Shipping Name Paint related material

Hazard Class 3
Subsidiary Hazard Class II
Emergency Response Guide 128

Number

IATA

UN/ID no. 1263

Proper Shipping Name Paint related material

Hazard Class3Packing GroupIIERG Code128

<u>Additional information</u> Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA Complies Complies **DSL/NDSL** Complies **EINECS/ELINCS** Complies **ENCS** Complies **IECSC** Complies **KECL PICCS** Complies **AICS** Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

SARA 311/312 Hazardous

Categorization

Acute Health Hazard Yes
Chronic Health Hazard Yes
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs	RQ
ACETONE	5000 lb		RQ 5000 lb final RQ
67-64-1			RQ 2270 kg final RQ

United States of America

California Prop. 65

None of the ingredients are listed with California Proposition 65.

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
ACETONE	X	X	X
67-64-1			
METHYL ACETATE 79-20-9	X	X	Х

F041-0074 THINNER CLEAR

Revision Date 28-Jul-2015

16. OTHER INFORMATION

NFPAHealth 2Flammability 3Instability 0Physical hazard *HMIS (HazardousHealth 2*Flammability 3Reactivity 0

Material Information

System)

Prepared By Tnemec Regulatory Dept: 816-474-3400

Revision Date 28-Jul-2015

Revision Summary 9 4 5 7 10 8 11 14 13 15

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of MSDS



Safety Data Sheet

Issue Date 27-Jul-2015 Revision Date 27-Jul-2015 Revision Number 4

1. IDENTIFICATION

Product identifier

Product Code F041-0075
Product Name THINNER CLEAR

Other means of identification

Common Name NO. 75 THINNER

UN/ID no. 1263

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Flammable Liquids	Category 2

Label elements

EMERGENCY OVERVIEW

LIVILITY OVERVIEW			
Danger			

Hazard statements

Harmful if swallowed

Harmful in contact with skin

Harmful if inhaled

Causes skin irritation

Causes serious eye damage

Suspected of causing cancer

May cause respiratory irritation. May cause drowsiness or dizziness

May cause damage to organs through prolonged or repeated exposure

May be fatal if swallowed and enters airways

Highly flammable liquid and vapor



Appearance opaque

Physical state liquid

Odor aromatic

Precautionary Statements

Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/mixing/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

Response

IF exposed or concerned: Get medical advice/attention

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

Call a POISON CENTER or doctor/physician if you feel unwell

If skin irritation occurs: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Rinse mouth

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

Toxic to aquatic life with long lasting effects

SEE SAFETY DATA SHEET

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
Trade secret	-	30 - 60%
XYLENE	1330-20-7	30 - 60%
N-BUTANOL (SKIN)	71-36-3	10 - 30%
ETHYL BENZENE	100-41-4	1 - 10%

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact In the case of contact with eyes, rinse immediately with plenty of water and seek medical

advice.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If skin irritation persists, call a physician.

Inhalation Remove to fresh air. Oxygen or artificial respiration if needed.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately.

Self-protection of the first aiderUse personal protective equipment. Avoid contact with eyes, skin and clothing.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Water.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all

sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment Remove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

Methods for cleaning up If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated

absorbent, container and unused contents in accordance with local, state and federal

regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Close container after each use. Avoid contact with eyes, skin and clothing. Do not eat, drink

or smoke when using this product. If splashes are likely to occur, wear goggles. Wear protective gloves/clothing. Do not burn, or use a cutting torch on, the empty drum. When used in a mixture, read the labels and safety data sheets of all components. Wash

thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of

children.

Incompatible products Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Trade secret	TWA: 50 ppm	TWA: 100 ppm TWA: 465 mg/m³	800 ppm
XYLENE 1330-20-7	TWA: 100 ppm STEL: 150 ppm	TWA: 100 ppm TWA: 435 mg/m³ STEL: 150 ppm STEL: 655 mg/m³	
N-BUTANOL (SKIN) 71-36-3	TWA: 20 ppm	Skin Ceiling: 50 ppm Ceiling: 150 mg/m³ TWA: 100 ppm TWA: 300 mg/m³	1400 ppm

800 ppm ETHYL BENZENE TWA: 20 ppm TWA: 100 ppm TWA: 435 mg/m³ 100-41-4 STEL: 125 ppm STEL: 545 mg/m³

Appropriate engineering controls

Sufficient ventilation, in volume and pattern, should be provided through both local and **Engineering measures**

general exhaust to keep the air contaminant concentration below current applicable OSHA

Permissible Exposure Limits (PEL) and ACGIH's Threshold Limit Values (TLV).

Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Use chemical resistant splash type goggles. If splashes are likely to occur, wear

face-shield.

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, Skin and body protection

as appropriate, to prevent skin contact.

Respiratory protection Use only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

Handle in accordance with good industrial hygiene and safety practice. General hygiene considerations

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid **Appearance** opaque

Odor aromatic No information available Odor threshold

Color No information available

Property Remarks Values

No data available Melting point / freezing point No data available

116 °C / 241.0 °F Boiling point / boiling range

Flash point 26 °C / 78.0 °F Pensky Martens - Closed Cup

Evaporation rate No data available Flammability (solid, gas) Not applicable Flammability Limit in Air No data available

Upper flammability limit N/A Lower flammability limit 1.0

Vapor pressure No data available

Vapor density No data available

Specific gravity .83749 a/cm3

Water solubility Insoluble in cold water

Solubility in other solvents No data available Partition coefficient: n-octanol/water No data available **Autoignition temperature** No data available

No data available **Decomposition temperature** Kinematic viscosity No data available No data available **Dynamic viscosity**

Other Information

6.96920 lbs/gal Density

Volatile organic compounds (VOC) 6.969 lbs/gal

content

Total volatiles weight percent 100.0000 % Total volatiles volume percent 100.0000 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Causes serious eye damage. Eye contact

CAUSES SKIN IRRITATION. Skin contact

Ingestion Harmful if swallowed. Potential for aspiration if swallowed. Aspiration may cause pulmonary

edema and pneumonitis.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Trade secret	= 1600 mg/kg (Rat) = 1670 mg/kg	= 12.6 mL/kg (Rabbit) = 12600	> 2000 ppm (Rat) 4 h
	(Rat)	μL/kg (Rabbit)	
XYLENE	= 3500 mg/kg (Rat)	> 1700 mg/kg (Rabbit) > 4350	= 29.08 mg/L (Rat) 4 h = 5000
1330-20-7		mg/kg (Rabbit)	ppm (Rat)4h
N-BUTANOL (SKIN)	= 700 mg/kg (Rat) = 790 mg/kg (= 3402 mg/kg (Rabbit) = 3400	> 8000 ppm (Rat) 4 h
71-36-3	Rat)	mg/kg (Rabbit)	
ETHYL BENZENE	= 3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 17.2 mg/L (Rat) 4 h
100-41-4			

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Eye Damage.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available. No information available. Mutagenicity

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	ACGIH	IARC	NTP	OSHA
XYLENE		Group 3		
1330-20-7		-		

ETHYL BENZENE	A3	Group 2B	X
100-41-4			

Reproductive effects No information available.

STOT - single exposure Skin, Eyes, Central Nervous System (CNS)

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure

Target organ effects blood, Central nervous system, Gastrointestinal tract, Eyes, kidney, liver, respiratory

system, Skin, Peripheral Nervous System (PNS).

Aspiration hazard Risk of serious damage to the lungs (by aspiration).

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
Trade secret		126 - 137: 96 h Pimephales promelas mg/L LC50 flow-through	
		1 0	
XYLENE		LC50= 13.4 mg/L Pimephales	EC50 = 3.82 mg/L 48 h LC50 = 0.6
1330-20-7		promelas 96 h LC50 2.661 - 4.093	mg/L 48 h
		mg/L Oncorhynchus mykiss 96 h	
		LC50 13.5 - 17.3 mg/L	
		Oncorhynchus mykiss 96 h LC50	
		13.1 - 16.5 mg/L Lepomis	
		macrochirus 96 h LC50= 19 mg/L Lepomis macrochirus 96 h LC50	
		7.711 - 9.591 mg/L Lepomis	
		macrochirus 96 h LC50 23.53 -	
		29.97 mg/L Pimephales promelas	
		96 h LC50= 780 mg/L Cyprinus	
		carpio 96 h LC50> 780 mg/L	
		Cyprinus carpio 96 h LC50 30.26 -	
		40.75 mg/L Poecilia reticulata 96 h	
N-BUTANOL (SKIN)	500: 96 h Desmodesmus	1740: 96 h Pimephales promelas	1897 - 2072: 48 h Daphnia magna
71-36-3	subspicatus mg/L EC50 500: 72 h	mg/L LC50 flow-through 1910000:	mg/L EC50 Static 1983: 48 h
	Desmodesmus subspicatus mg/L	96 h Pimephales promelas µg/L	Daphnia magna mg/L EC50
	EC50	LC50 static 100000 - 500000: 96 h	, ,
		Lepomis macrochirus µg/L LC50	
		static 1730 - 1910: 96 h Pimephales	
		promelas mg/L LC50 static	
ETHYL BENZENE	4.6: 72 h Pseudokirchneriella	11.0 - 18.0: 96 h Oncorhynchus	1.8 - 2.4: 48 h Daphnia magna mg/L
100-41-4	subcapitata mg/L EC50 438: 96 h	mykiss mg/L LC50 static 32: 96 h	EC50
	Pseudokirchneriella subcapitata	Lepomis macrochirus mg/L LC50	
	mg/L EC50 2.6 - 11.3: 72 h	static 4.2: 96 h Oncorhynchus	
	Pseudokirchneriella subcapitata	mykiss mg/L LC50 semi-static 7.55 -	
	mg/L EC50 static 1.7 - 7.6: 96 h	11: 96 h Pimephales promelas mg/L	
	Pseudokirchneriella subcapitata	LC50 flow-through 9.6: 96 h Poecilia	
	mg/L EC50 static	reticulata mg/L LC50 static 9.1 -	
		15.6: 96 h Pimephales promelas	
		mg/L LC50 static	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
Trade secret	1.98

XYLENE 1330-20-7	2.77
N-BUTANOL (SKIN) 71-36-3	0.785
ETHYL BENZENE 100-41-4	3.118

Other Adverse Effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

Component	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
XYLENE	Included in waste stream:			U239
1330-20-7		F039		
N-BUTANOL (SKIN)		Included in waste stream:		U031
71-36-3		F039		
ETHYL BENZENE	Included in waste stream:			
100-41-4	F039			

Component	CAWAST
XYLENE	Toxic
1330-20-7	Ignitable
N-BUTANOL (SKIN) 71-36-3	Toxic
ETHYL BENZENE	Toxic
100-41-4	Ignitable

14. TRANSPORT INFORMATION

DOT

UN/ID no. 1263

Proper Shipping Name Paint related material

Hazard Class 3
Packing Group III
Emergency Response Guide 128

Number

<u>IATA</u>

UN/ID no. 1263

Proper Shipping Name Paint related material

Hazard Class3Packing GroupIIIERG Code366

Additional information Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA Complies DSL/NDSL Complies

F041-0075 THINNER CLEAR

EINECS/ELINCS Complies
ENCS Complies
IECSC Complies
KECL Complies
PICCS Complies
AICS Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

Component HAPS Data

XYLĖNE

ETHYL BENZENE

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

Component	SARA 313 - Threshold Values	
XYLENE - 1330-20-7	1.0	
N-BUTANOL (SKIN) - 71-36-3	1.0	
ETHYL BENZENE - 100-41-4	0.1	

SARA 311/312 Hazardous

Categorization

Acute Health Hazard Yes
Chronic Health Hazard Yes
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
XYLENE	100 lb			X
1330-20-7				
ETHYL BENZENE	1000 lb	X	X	X
100-41-4				

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs	RQ
XYLENE	100 lb		RQ 100 lb final RQ
1330-20-7			RQ 45.4 kg final RQ
N-BUTANOL (SKIN)	5000 lb		RQ 5000 lb final RQ
71-36-3			RQ 2270 kg final RQ
ETHYL BENZENE	1000 lb		RQ 1000 lb final RQ
100-41-4			RQ 454 kg final RQ

United States of America

California Prop. 65

WARNING! This product contains a chemical known in the State of California to cause cancer

Transfer the product contains a chemical fatour in the state of cameria to cade cancer		
Component	California Prop. 65	
ETHYL BENZENE - 100-41-4	Carcinogen	

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
Trade secret	X	X	Х
XYLENE 1330-20-7	Х	X	Х
N-BUTANOL (SKIN) 71-36-3	X	X	Х
ETHYL BENZENE 100-41-4	X	X	Х

16. OTHER INFORMATION

NFPA Health 2 Flammability 3 Instability 1 Physical hazard *
HMIS (Hazardous Health 2* Flammability 3 Reactivity 1

Material Information
System)

System)

Prepared By Tnemec Regulatory Dept: 816-474-3400

Revision Date 27-Jul-2015 Revision Summary

9 4 5 7 10 8 11 14 **Disclaimer**

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of MSDS



Safety Data Sheet

Issue Date 16-Jul-2015 Revision Date 16-Jul-2015 Revision Number 5

1. IDENTIFICATION

Product identifier

Product Code F041-0078
Product Name F041-NRE GRAY

Other means of identification

Common Name NO. 78 THINNER

UN/ID no. 1263

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.

Uses advised againstConsumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400

24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 2
Flammable Liquids	Category 2

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Harmful if swallowed

Causes skin irritation

Causes serious eye irritation

May cause respiratory irritation. May cause drowsiness or dizziness

May cause damage to organs through prolonged or repeated exposure

May be harmful if swallowed and enters airways

Highly flammable liquid and vapor



Appearance clear Physical state liquid Odor aromatic

Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Wear protective gloves/protective clothing/eye protection/face protection

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/mixing/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

Response

Get medical advice/attention if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

If skin irritation occurs: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

SEE SAFETY DATA SHEET

Acute Toxicity

 $48.55031999\ \%$ of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
tert-BUTYL ACETATE	540-88-5	30 - 60%
P-CHLOROBENZOTRIFLUORIDE	98-56-6	30 - 60%
METHYL N-AMYL KETONE	110-43-0	1 - 10%

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

eye irritation persists, consult a specialist.

Skin contact Wash off immediately with soap and plenty of water. Consult a physician if necessary.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Consult a physician.

Ingestion Aspiration hazard. Drink 1 or 2 glasses of water. Do not induce vomiting without medical

advice. Consult a physician. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

alcohol-resistant foam. Carbon dioxide. Dry chemical.

Unsuitable extinguishing media Water.

Specific hazards arising from the chemical

FLAMMABLE Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and

liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic

compounds. Carbon oxides. Hydrocarbons.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all

sources of ignition. Pay attention to flashback. Ensure adequate ventilation.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containmentRemove all sources of ignition. Spills may be collected with inert, absorbent material for

proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer

absorbent material to suitable containers for proper disposal.

absorbent, container and unused contents in accordance with local, state and federal

regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Close container after each use. Avoid contact with eyes, skin and clothing. Handle in

accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. When used in a mixture, read the labels and safety data sheets of all components. Wash thoroughly after handling. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Do not burn, or use a cutting torch on, the empty drum. Wear personal protective equipment. Do not breathe vapours or spray mist.

Conditions for safe storage, including any incompatibilities

Storage Keep away from heat, sparks and flame. Use only in an area containing flame proof

equipment. Prevent build-up of vapors by opening all windows and doors to achieve cross

ventilation.

Incompatible productsStrong oxidizing agents. Incompatible with strong acids and bases. Alkalis.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
tert-BUTYL ACETATE 540-88-5	TWA: 200 ppm	TWA: 200 ppm TWA: 950 mg/m³	1500 ppm
P-CHLOROBENZOTRIFLUORIDE 98-56-6	TWA: 2.5 mg/m ³	-	
METHYL N-AMYL KETONE 110-43-0	TWA: 50 ppm	TWA: 100 ppm TWA: 465 mg/m³	800 ppm

Appropriate engineering controls

Engineering measures Ensure adequate ventilation, especially in confined areas. Sufficient ventilation, in volume

and pattern, should be provided through. both local and general exhaust to keep the air

contaminant concentration.

Individual protection measures, such as personal protective equipment

Eye/face protection Use chemical resistant splash type goggles.

Skin and body protectionWear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

Respiratory protectionUse only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and

after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

Appearance clear Odor aromatic

Color No information available **Odor threshold** No information available

Property Values Remarks

pH No data available
Melting point / freezing point No data available

Melting point / freezing point No data availab

Boiling point / boiling range 98 °C / 208 °F

Flash point 16 °C / 60 °F Pensky Martens - Closed Cup

Evaporation rate

No data available
Flammability (solid, gas)

Not applicable

Flammability Limit in Air No data available

Upper flammability limit N/A
Lower flammability limit 1.1

Vapor pressureNo data availableVapor densityNo data available

Specific gravity

1.01718

No data available g/cm3

Water solubility Insoluble in cold water

Solubility in other solvents
Partition coefficient: n-octanol/water
Autoignition temperature
No data available
Decomposition temperature
No data available

Decomposition temperatureNo data availableKinematic viscosityNo data availableDynamic viscosityNo data available

Other Information

Density 8.46449 lbs/gal Volatile organic compounds (VOC) 4.19929 lbs/gal

content

Total volatiles weight percent 93.71 % Total volatiles volume percent 93.13 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents, Incompatible with strong acids and bases, Alkalis

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact Severely irritating to eyes.

Skin contact Irritating to skin.

Ingestion May be harmful if swallowed and enters airways. Potential for aspiration if swallowed.

Aspiration may cause pulmonary edema and pneumonitis.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
tert-BUTYL ACETATE 540-88-5	= 4100 mg/kg (Rat)	> 2 g/kg (Rabbit)	> 2230 mg/m³ (Rat) 4 h
P-CHLOROBENZOTRIFLUORIDE 98-56-6	= 13 g/kg (Rat)	> 2 mL/kg(Rabbit)	= 33 mg/L (Rat)4 h
METHYL N-AMYL KETONE 110-43-0	= 1600 mg/kg (Rat) = 1670 mg/kg (Rat)	= 12.6 mL/kg(Rabbit)= 12600 μL/kg(Rabbit)	> 2000 ppm (Rat) 4 h

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Skin disorders.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available. MutagenicityNo information available.

Carcinogenicity There are no known carcinogenic chemicals in this product.

Reproductive effectsNo information available.

STOT - single exposure Skin, Eyes, Central Nervous System (CNS)

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure

Target organ effects Central nervous system, Eyes, Peripheral Nervous System (PNS), respiratory system, Skin,

liver, kidney.

Aspiration hazard Risk of serious damage to the lungs (by aspiration).

Acute Toxicity 48.55031999 % of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

42.74111 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
tert-BUTYL ACETATE		296 - 362: 96 h Pimephales	
540-88-5		promelas mg/L LC50 flow-through	
P-CHLOROBENZOTRIFLUORIDE		11.5 - 15.8: 48 h Lepomis	3.68: 48 h Daphnia magna mg/L
98-56-6		macrochirus mg/L LC50 static	EC50
METHYL N-AMYL KETONE		126 - 137: 96 h Pimephales	
110-43-0		promelas mg/L LC50 flow-through	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
tert-BUTYL ACETATE	1.38
540-88-5	
P-CHLOROBENZOTRIFLUORIDE	3.7
98-56-6	
METHYL N-AMYL KETONE	1.98
110-43-0	

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in

accordance with local, state and federal regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. TRANSPORT INFORMATION

DOT

UN/ID no. 1263

Proper Shipping Name Paint related material

Hazard Class 3
Packing Group II
Emergency Response Guide 128

Number

<u>IATA</u>

UN/ID no. 1263

Proper Shipping Name Paint related material

Hazard Class 3
Packing Group II
ERG Code 364

<u>Additional information</u> Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA Complies DSL/NDSL Complies Complies **EINECS/ELINCS** Does not comply **ENCS IECSC** Complies Does not comply **KECL PICCS** Does not comply **AICS** Does not comply

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

SARA 311/312 Hazardous

Categorization

Acute Health Hazard Yes **Chronic Health Hazard** No Yes Fire Hazard Yes **Sudden Release of Pressure Hazard** Nο **Reactive Hazard** No

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
tert-BUTYL ACETATE 540-88-5				X

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs	RQ
tert-BUTYL ACETATE	5000 lb		RQ 5000 lb final RQ
540-88-5			RQ 2270 kg final RQ

United States of America

California Prop. 65

None of the ingredients are listed with California Proposition 65.

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
tert-BUTYL ACETATE 540-88-5	X	X	Х
P-CHLOROBENZOTRIFLUORIDE 98-56-6	X		X
METHYL N-AMYL KETONE 110-43-0	Х	X	Х

16. OTHER INFORMATION

NFPA Health 2 Flammability 3 Instability 1 Physical hazard *

HMIS (Hazardous Material Information

System)

Health 2* Flammability 3 Reactivity 1

Tnemec Regulatory Dept: 816-474-3400 **Prepared By** 16-Jul-2015 **Revision Date**

Revision Summary 9 4 5 7 10 8 11 14 15

F041-0078 THINNER GRAY Revision Date 16-Jul-2015

Disclaimer

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End of MSDS