Safety Data Sheet MELCHEM Safety Data Sheet dated: 08/23/2021 - version 6 Date of first edition: 05/14/2015



1. IDENTIFICATION

Product identifier Mixture identification: Trade name: MELCHEM Trade code: 9022165 Recommended use of the chemical and restrictions on use Recommended use: Admixture for concrete Restrictions on use: Not available Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party Company: MAPEI CORP. (USA and Puerto Rico) 1144 East Newport Center Drive - 33442 - Deerfield Beach - FL - USA Phone: 954-246-8888 Responsible: RDProductSafety@mapei.com Emergency 24 hour numbers: Emergency Number (USA/Canada) CHEMTREC 1(800) 424-9300 / 1(703) 527-3887 Emergency Transport CANUTEC (Canada) 1-613-996-6666

2. HAZARD(S) IDENTIFICATION



Classification of the chemical

Skin Sens. 1

1 May cause an allergic skin reaction.

Carc. 2 Suspected of causing cancer if inhaled, in contact with skin and if swallowed.

Label elements

Hazard pictograms and Signal Word



Hazard statements

H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer if inhaled, in contact with skin and if swallowed.

Precautionary statements

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P201	Obtain special instructions before use.	
P202	Do not handle until all safety precautions have been read and understood.	
P261	Avoid breathing mist/vapours/spray.	
P272	Contaminated work clothing should not be allowed out of the workplace.	
P280	Wear protective gloves/protective clothing/eye protection/face protection.	
P302+P352	IF ON SKIN: Wash with plenty of water.	
P308+P313	IF exposed or concerned: Get medical advice/attention.	
P321	Specific treatment (see supplementary instructions on this label).	
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.	
P362+P364	Take off contaminated clothing and wash it before reuse.	
P405	Store locked up.	
P501	Dispose of contents/container in accordance with applicable regulations.	
Ingredient(s) with unknown acute toxicity:		
None		

Hazards not otherwise classified identified during the classification process:

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Not available

Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

List of components

Concentra Name tion (% w/w)	Ident. Numb.	Classification	Registration Number
0.1-0.25 % formaldehyde; formalin	CAS:50-00-0	Skin Corr. 1B, H314; Skin Sens. 1, H317; Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; Carc. 2, H351	

4. FIRST AID MEASURES

Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Obtain medical attention if skin related symptoms persist.

Remove contaminated clothing immediately and dispose of safely.

In case of eyes contact:

Wash immediately with water.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

Most important symptoms/effects, acute and delayed

Not available

Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Treatment

(see paragraph 4.1)

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Unsuitable extinguishing media:

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: Not available

Explosive properties: Not available

Oxidizing properties: Not available

Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Move undamaged containers from immediate hazard area if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Limit leakages with earth or sand. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

Storage temperature: Not available

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

List of components with OEL value

Component formaldehyde; formalin	OEL Type OSHA	Country	Ceiling	Long Term mg/m3	Long Term ppm 0.75	Short Term mg/m3	Short Term ppm 2	Behaviour	Note
Tormaldenyde, Tormalin	ACGIH		С		0.75		0.3		
	ACGIH				0.1		0.3		A1 - Confirmed Human Carcinogen;eye and upper respiratory tract irritation;upper respiratory tract cancer;dermal sensitizer; respiratory sensitizer;
	MAK	GERMANY		0.37	0.3				
	ACGIH				0.1		0.3		A1 - Confirmed Human Carcinogen;eye and upper respiratory tract irritation;upper respiratory tract cancer;dermal sensitizer; respiratory sensitizer
	MAK	AUSTRIA		0.37	0.3	0.74	0.6		
	MAK	SWITZERLAND		0.37	0.3				
	EU			0.37	0.3			Binding	

Appropriate engineering controls: Not available

Individual protection measures

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; 29 CFR 1910.138 - ANSI/ISEA 105:

Polychloroprene - CR: thickness >=0,5mm; breakthrough time >=480min.

Nitrile rubber - NBR: thickness >=0,35mm; breakthrough time >=480min.

Butyl rubber - IIR: thickness >=0,5mm; breakthrough time >=480min.

Fluorinated rubber - FKM: thickness >=0,4mm; breakthrough time >=480min.

Use impervious gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to 29 CFR 1910.134 - CSA Z94.4 for information on selection and use of appropriate respiratory protection equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state: Liquid Appearance and colour: Liquid Red Odour: Like: Amines Odour threshold: No data available pH: 9.50 Melting point / freezing point: No data available Initial boiling point and boiling range: No data available Flash point: 100 °C (212 °F) Evaporation rate: No data available Upper/lower flammability or explosive limits: No data available Vapour density: No data available Vapour pressure: No data available Relative density: 1.19 g/cm3 Solubility in water: No data available Solubility in oil: No data available Partition coefficient (n-octanol/water): No data available Auto-ignition temperature: No data available Decomposition temperature: No data available Viscosity: No data available Explosive properties: No data available Oxidizing properties: No data available Solid/gas flammability: No data available **Other information**

Substance Groups relevant properties No data available Miscibility: No data available Fat Solubility: No data available Conductivity: No data available

10. STABILITY AND REACTIVITY

Reactivity

Stable under normal conditions

Chemical stability

Data not available.

Possibility of hazardous reactions

None.

Conditions to avoid

Stable under normal conditions.

Incompatible materials

None in particular.

Hazardous decomposition products

None.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicological information of the product:

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information of the main substances found in the product:

formaldehyde; formalin	a) acute toxicity	LD50 Skin Rabbit = 270 mg/kg
		LD50 Oral Rat = 500 mg/kg
		LD50 Skin Rabbit = 270 mg/kg
		LC50 Inhalation Rat = 0.578 mg/l 4h
		LD50 Oral Rat = 100 mg/kg

If not differently specified, the information required in the regulation and listed below must be considered as N.A.

a) acute toxicity

b) skin corrosion/irritation

- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure

Toxicological kinetics, metabolism and distribution information

i) STOT-repeated exposure

j) aspiration hazard

Substance(s) listed on the IARC Monographs:

formaldehyde; formalin Group 1

Substance(s) listed as OSHA Carcinogen(s):

formaldehyde; formalin

Substance(s) listed as NIOSH Carcinogen(s):

formaldehyde; formalin

Substance(s) listed on the NTP report on Carcinogens:

formaldehyde; formalin

12. ECOLOGICAL INFORMATION

Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of components with eco-toxicological properties

Component	Ident. Numb.	Ecotox Infos
formaldehyde; formalin	CAS: 50-00-0	a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 1510 μ g/L 96h EPA
		a) Aquatic acute toxicity: LC50 Fish Brachydanio rerio = 41 mg/L 96h IUCLID
		a) Aquatic acute toxicity: LC50 Fish Oncorhynchus mykiss 100 mg/L 96h EPA
		a) Aquatic acute toxicity: LC50 Daphnia Daphnia magna = 2 mg/L 48h IUCLID
		a) Aquatic acute toxicity: LC50 Fish Pimephales promelas 22.6 mg/L 96h EPA
		a) Aquatic acute toxicity: LC50 Fish Oncorhynchus mykiss 0.032 mL/L 96h EPA
		a) Aquatic acute toxicity: LC50 Fish Pimephales promelas 23.2 mg/L 96h EPA
		a) Aquatic acute toxicity: EC50 Daphnia Daphnia magna 11.3 mg/L 48h EPA
Persistence and degradability		
Not available		
Bioaccumulative potential		
Not available		
Mobility in soil		
Not available		
Other adverse effects		
Not available		

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Recover if possible. Methods of disposal:

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Empty containers or liners may retain some product residues. Do not re-use empty containers.

14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

UN number

ADR-UN number: Not available DOT-UN Number: Not available IATA-Un number: Not available

IMDG-Un number: Not available

UN proper shipping name

ADR-Shipping Name: Not available DOT-Proper Shipping Name: Not available IATA-Technical name: Not available IMDG-Technical name: Not available

Transport hazard class(es)

ADR-Class: Not available DOT-Hazard Class: Not available IATA-Class: Not available IMDG-Class: Not available

Packing group

ADR-Packing Group: Not available DOT-Packing group: Not available IATA-Packing group: Not available IMDG-Packing group: Not available

Environmental hazards

Marine pollutant: No

Environmental Pollutant: Not available

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not available

Special precautions

Department of Transportation (DOT): Not available Road and Rail (ADR-RID) : Not available Air (IATA) : Not available Sea (IMDG) :

Not available

15. REGULATORY INFORMATION

USA - Federal regulations

TSCA - Toxic Substances Control Act

TSCA inventory:

All the components are listed on the TSCA inventory

TSCA listed substances:

formaldehyde; formalin

is listed in TSCA Section 8b Section 5

	Section 302 - Extremely Hazardous Substances:
	formaldehyde; formalin
	Section 304 - Hazardous substances:
	formaldehyde; formalin
	Section 313 - Toxic chemical list:
	formaldehyde; formalin
CERC	LA - Comprehensive Environmental Response, Compensation, and Liability Act Substance(s) listed under CERCLA:
	formaldehyde; formalin Reportable quantity: 100 pounds
CAA -	· Clean Air Act
	CAA listed substances:
	formaldehyde; formalin is listed in CAA Section 112(b) - HAP Section 112(b) - HON
CWA	- Clean Water Act
	CWA listed substances:
	formaldehyde; formalin is listed in CWA Section 311
	- State specific regulations
Califo	ornia Proposition 65 Substance(s) listed under California Proposition 65:
	formaldehyde; formalin Listed as carcinogen
Mass	achusetts Right to know
11055	Substance(s) listed under Massachusetts Right to know:
	formaldehyde; formalin
Penn	sylvania Right to know
	Substance(s) listed under Pennsylvania Right to know:
	formaldehyde; formalin
New	Jersey Right to know
	Substance(s) listed under New Jersey Right to know:
	formaldehyde; formalin
Cana	da - Federal regulations
DSL -	Domestic Substances List
	DSL (Domestic Substances List)
	All the substances are listed in the DSL.
NDSL	- Non Domestic Substances List
	NDSL (Non Domestic Substances List) No substances listed
NPRI	 National Pollutant Release Inventory NPRI (National Pollutant Release Inventory) - List of substances listed.
	No substances listed
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Additional classification information

NFPA Health: 1 =Slight NFPA Flammability: 1 = Combustible if heated NFPA Reactivity: 0 = Minimal NFPA Special Risk: Not available



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This document was prepared by a competent person who has received appropriate training.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Code	Description
H301	Toxic if swallowed.

MELCHEM

- H311 Toxic in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H331 Toxic if inhaled.
- H351 Suspected of causing cancer.
- H351 Suspected of causing cancer if inhaled, in contact with skin and if swallowed.

Legend to abbreviations and acronyms used in the safety data sheet:

- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
- RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

- GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
- CLP: Classification, Labeling, Packaging.

EINECS: European Inventory of Existing Commercial Chemical Substances.

INCI: International Nomenclature of Cosmetic Ingredients.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

- GefStoffVO: Ordinance on Hazardous Substances, Germany.
- LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

DNEL: Derived No Effect Level.

PNEC: Predicted No Effect Concentration.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

WGK: German Water Hazard Class.

KSt: Explosion coefficient.

Paragraphs modified from the previous revision:

- 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 16. OTHER INFORMATION