

# Hilti Firestop Foam solid CFS-F SOL; CP 620

## Safety information for 2-Component-products

Date of issue: 02/03/2016

Revision date: 02/03/2016

Supersedes: 06/03/2015

Version: 6.1

### SECTION 1: Kit identification

#### 1.1 Product identifier

Name Hilti Firestop Foam solid CFS-F SOL; CP 620



Product code BU Chemicals

#### 1.2 Details of the supplier of the Safety information for 2-Component-products

Hilti, Inc.  
Legacy Tower, Suite 1000  
75024 Plano - USA  
T +1 9724035800  
1-800-879-8000 toll free - F +1 918 254 0522

### SECTION 2: General information

A SDS for each of these components is included. Please do not separate any component SDS from this cover page

### SECTION 3: Kit contents

#### Classification of the Product

##### GHS-US classification

Skin Irrit. 2	H315
Eye Irrit. 2	H319
Resp. Sens. 1	H334
Skin Sens. 1	H317
Carc. 2	H351
Repr. 2	H361d
STOT SE 3	H335
STOT RE 2	H373

#### Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US)



GHS07

GHS08

Signal word (GHS-US)

Danger

Hazard statements (GHS-US)

H315 - Causes skin irritation  
H317 - May cause an allergic skin reaction  
H319 - Causes serious eye irritation  
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled  
H335 - May cause respiratory irritation  
H351 - Suspected of causing cancer  
H361d - Suspected of damaging the unborn child  
H373 - May cause damage to organs through prolonged or repeated exposure  
P260 - Do not breathe vapours

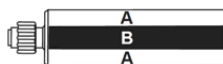
Precautionary statements (GHS-US)

# Hilti Firestop Foam solid CFS-F SOL; CP 620

## Safety information for 2-Component-products

P280 - Wear eye protection, protective clothing, protective gloves  
P285 - In case of inadequate ventilation wear respiratory protection  
P302+P352 - IF ON SKIN: Wash with plenty of water  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P342+P311 - If experiencing respiratory symptoms: Call a doctor, a POISON CENTER

### Additional information



Name	General description	Quantity	Unit	GHS-US classification
CFS-F SOL / CP 620, B		1	pcs (pieces)	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373
CFS-F SOL / CP 620, A		1	pcs (pieces)	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361

### SECTION 4: General advice

General advice

For professional users only

### SECTION 5: Safe handling advice

Environmental precautions

Avoid release to the environment

Storage conditions

Store in a well-ventilated place  
Keep cool

Precautions for safe handling

Do not handle until all safety precautions have been read and understood  
Wear personal protective equipment  
Do not breathe vapours  
Use only outdoors or in a well-ventilated area  
Avoid contact with skin and eyes  
In case of inadequate ventilation wear respiratory protection

Methods for cleaning up

Take up liquid spill into absorbent material  
Notify authorities if product enters sewers or public waters

### SECTION 6: First aid measures

First-aid measures after eye contact

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

First-aid measures after ingestion

Call a poison center or a doctor if you feel unwell

First-aid measures after inhalation

Remove person to fresh air and keep comfortable for breathing  
Call a poison center or a doctor if you feel unwell

First-aid measures after skin contact

Wash with plenty of soap and water  
If skin irritation or rash occurs: Get medical advice/attention  
Take off contaminated clothing

First-aid measures general

If you feel unwell, seek medical advice (show the label where possible)

Symptoms/injuries after eye contact

Eye irritation

Symptoms/injuries after inhalation

May cause respiratory irritation  
May cause allergy or asthma symptoms or breathing difficulties if inhaled

Symptoms/injuries after skin contact

Irritation  
May cause an allergic skin reaction

Other medical advice or treatment

Treat symptomatically

# Hilti Firestop Foam solid CFS-F SOL; CP 620

Safety information for 2-Component-products

---

## SECTION 7: Fire fighting measures

Protection during firefighting

Self-contained breathing apparatus  
Complete protective clothing

Hazardous decomposition products in case of fire

Toxic fumes may be released  
Carbon dioxide  
Carbon monoxide

## SECTION 8: Other information

No data available

# CFS-F SOL / CP 620, A

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 03/02/2016

Revision date: 04/26/2016

Supersedes: 03/02/2016

Version: 6.1

## SECTION 1: Identification

### 1.1. Identification

Product form	Mixture
Name	CFS-F SOL / CP 620, A
Product code	BU Chemicals

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

Supplier	Department issuing data specification sheet
Hilti, Inc.	Hilti AG
Legacy Tower, Suite 1000	Feldkircherstraße 100
75024 Plano - USA	9494 Schaan - Liechtenstein
T +1 9724035800	T +423 234 2111
1-800-879-8000 toll free - F +1 918 254 0522	<a href="mailto:chemicals.hse@hilti.com">chemicals.hse@hilti.com</a>

### 1.4. Emergency telephone number

Emergency number	Chem-Trec
	Tel.: 1 800 424 9300 (USA, PR, Virgin Islands, Canada)
	Tel.: 703 527 3887 (Other countries)
	+1 918 8723000
	1-800-879-8000 toll free

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### GHS-US classification

Skin Irrit. 2	H315 - Causes skin irritation
Eye Irrit. 2A	H319 - Causes serious eye irritation
Repr. 2	H361 - Suspected of damaging fertility or the unborn child

Full text of H-statements: see section 16

### 2.2. Label elements

#### GHS-US labelling

Hazard pictograms (GHS-US)



GHS07

GHS08

Signal word (GHS-US)

Warning

Hazard statements (GHS-US)

H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H361 - Suspected of damaging fertility or the unborn child

Precautionary statements (GHS-US)

P280 - Wear eye protection, protective clothing, protective gloves  
P302+P352 - If on skin: Wash with plenty of water  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P308+P313 - If exposed or concerned: Get medical advice/attention  
P332+P313 - If skin irritation occurs: Get medical advice/attention  
P337+P313 - If eye irritation persists: Get medical advice/attention

# CFS-F SOL / CP 620, A

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 2.3. Other hazards

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
Ethylenediamine, propoxylated	(CAS No) 25214-63-5	25 - 40	Eye Irrit. 2A, H319
tris(2-chloro-1-methylethyl) phosphate	(CAS No) 13674-84-5	2.5 - 5	Acute Tox. 4 (Oral), H302
2,2',6,6'-Tetrabromo-4,4'-isopropylidenediphenol, oligomeric reaction products with Propylene oxide and n-butyl glycidyl ether		2.5 - 5	Acute Tox. 4 (Oral), H302
Boric acid, zinc salt	(CAS No) 1332-07-6	2.5 - 5	Repr. 2, H361 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	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.
First-aid measures after ingestion	Call a poison center or a doctor if you feel unwell.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after skin contact	Irritation.
Symptoms/injuries after eye contact	Eye irritation.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	Water spray. Dry powder. Foam. Carbon dioxide.
------------------------------	--

### 5.2. Special hazards arising from the substance or mixture

Reactivity	The product is non-reactive under normal conditions of use, storage and transport.
------------	--

### 5.3. Advice for firefighters

Protection during firefighting	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
--------------------------------	--

# CFS-F SOL / CP 620, A

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures      Ventilate spillage area. Avoid contact with skin and eyes.

##### 6.1.2. For emergency responders

Protective equipment      Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up      Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information      Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling      Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid contact with skin and eyes.

Hygiene measures      Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions      Store locked up. Store in a well-ventilated place. Keep cool.

Storage temperature      41 - 77 °F

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Boric acid, zinc salt (1332-07-6)		
ACGIH	ACGIH TWA (mg/m³)	2 mg/m³
ACGIH	ACGIH STEL (mg/m³)	6 mg/m³

#### 8.2. Exposure controls

Appropriate engineering controls      Ensure good ventilation of the work station.  
Personal protective equipment      Safety glasses. Protective clothing. Gloves.



Hand protection      Wear impervious gloves.  
Eye protection      Safety glasses.  
Skin and body protection      Wear suitable protective clothing.

# CFS-F SOL / CP 620, A

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Respiratory protection	Wear respiratory protection.
Environmental exposure controls	Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	Liquid
Colour	red
Odour	There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odour(s): No data available on odour Mild odour Characteristic odour Amine-like odour Almost odourless Alcohol odour Odourless
Odour threshold	No data available
pH	Not determined
Melting point	Not applicable
Freezing point	No data available
Boiling point	No data available
Flash point	Not applicable
Relative evaporation rate (butylacetate=1)	No data available
Flammability (solid, gas)	No data available
Explosive limits	No data available
Explosive properties	No data available
Oxidising properties	No data available
Vapour pressure	No data available
Relative density	No data available
Relative vapour density at 20 °C	No data available
Density	≈ 1.17 g/cm <sup>3</sup>
Solubility	No data available
Log Pow	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

## CFS-F SOL / CP 620, A

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**10.5. Incompatible materials**

No additional information available

**10.6. Hazardous decomposition products**

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects**

Acute toxicity

Not classified

<b>tris(2-chloro-1-methylethyl) phosphate (13674-84-5)</b>	
LD50 oral rat	2800 - 4200 mg/kg bodyweight (Rat; Equivalent or similar to OECD 401; Experimental value; 1011-1824 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rat	> 2000 mg/kg (Rat; Experimental value)
LD50 dermal rabbit	> 2000 mg/kg bodyweight (Rabbit; Experimental value; OECD 402: Acute Dermal Toxicity)
ATE US (oral)	500.000 mg/kg bodyweight

<b>Boric acid, zinc salt (1332-07-6)</b>	
LD50 oral rat	> 5000 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)

<b>2,2',6,6'-Tetrabromo-4,4'-isopropylidenediphenol, oligomeric reaction products with Propylene oxide and n-butyl glycidyl ether</b>	
LD50 oral rat	732 mg/kg
LD50 dermal rat	> 2000 mg/kg
ATE US (oral)	500.000 mg/kg bodyweight

Skin corrosion/irritation	Causes skin irritation. pH: Not determined
Serious eye damage/irritation	Causes serious eye irritation. pH: Not determined
Respiratory or skin sensitisation	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Suspected of damaging fertility or the unborn child.
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration hazard	Not classified
Symptoms/injuries after skin contact	Irritation.
Symptoms/injuries after eye contact	Eye irritation.

**SECTION 12: Ecological information****12.1. Toxicity**

Ecology - general Harmful to aquatic life with long lasting effects.

<b>tris(2-chloro-1-methylethyl) phosphate (13674-84-5)</b>	
LC50 fish 1	98 mg/l (96 h; Pimephales promelas; GLP)
EC50 Daphnia 1	65 - 335 mg/l (48 h; Daphnia magna; GLP)
LC50 fish 2	56.2 mg/l (96 h; Brachydanio rerio)



# CFS-F SOL / CP 620, A

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

tris(2-chloro-1-methylethyl) phosphate (13674-84-5)	
Threshold limit algae 1	73 mg/l (96 h; Selenastrum capricornutum; Growth rate)
Boric acid, zinc salt (1332-07-6)	
LC50 fish 1	2.61 mg/l (96 h; Pimephales promelas; Zinc ion)
EC50 Daphnia 1	0.068 mg/l (48 h; Daphnia magna; Zinc ion)

### 12.2. Persistence and degradability

tris(2-chloro-1-methylethyl) phosphate (13674-84-5)	
Persistence and degradability	Not readily biodegradable in water. No (test)data on mobility of the substance available.
Boric acid, zinc salt (1332-07-6)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

### 12.3. Bioaccumulative potential

tris(2-chloro-1-methylethyl) phosphate (13674-84-5)	
BCF fish 1	0.8 - 4.6 (Cyprinus carpio; Test duration: 6 weeks)
Log Pow	2.59 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
Boric acid, zinc salt (1332-07-6)	
Bioaccumulative potential	No bioaccumulation data available.

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Effect on the global warming No known ecological damage caused by this product.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods Dispose of contents/container in accordance with licensed collector's sorting instructions.  
Waste disposal recommendations Dispose in a safe manner in accordance with local/national regulations.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

Not regulated for transport

### 14.2. UN proper shipping name

Proper Shipping Name (ADR) Not applicable  
Proper Shipping Name (IMDG) Not applicable  
Proper Shipping Name (IATA) Not applicable  
Proper Shipping Name (ADN) Not applicable

# CFS-F SOL / CP 620, A

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Proper Shipping Name (RID) Not applicable

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR) Not applicable

#### IMDG

Transport hazard class(es) (IMDG) Not applicable

#### IATA

Transport hazard class(es) (IATA) Not applicable

#### ADN

Transport hazard class(es) (ADN) Not applicable

#### RID

Transport hazard class(es) (RID) Not applicable

### 14.4. Packing group

Packing group (ADR) Not applicable

Packing group (IMDG) Not applicable

Packing group (IATA) Not applicable

Packing group (ADN) Not applicable

Packing group (RID) Not applicable

### 14.5. Environmental hazards

Dangerous for the environment No

Marine pollutant No

Other information No supplementary information available

### 14.6. Special precautions for user

#### - Overland transport

#### - Transport by sea

No data available

#### - Air transport

No data available

#### - Inland waterway transport

Carriage prohibited (ADN) No

Not subject to ADN No

#### - Rail transport

Carriage prohibited (RID) No

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

No additional information available

# CFS-F SOL / CP 620, A

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Irrit. 2 H315

Eye Irrit. 2 H319

Repr. 2 H361

Full text of hazard classes and H-statements : see section 16

#### National regulations

No additional information available

### 15.3. US State regulations

No additional information available

## SECTION 16: Other information

Revision date

04/26/2016

Full text of H-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H361	Suspected of damaging fertility or the unborn child
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

SDS\_US\_Hilti

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*

# CFS-F SOL / CP 620, B

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 03/02/2016

Revision date: 04/26/2016

Supersedes: 03/02/2016

Version: 6.1

## SECTION 1: Identification

### 1.1. Identification

Product form	Mixture
Name	CFS-F SOL / CP 620, B
Product code	BU Chemicals

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

Hilti, Inc.  
Legacy Tower, Suite 1000  
75024 Plano - USA  
T +1 9724035800  
1-800-879-8000 toll free - F +1 918 254 0522

#### Supplier

Hilti, Inc.  
Legacy Tower, Suite 1000  
75024 Plano - USA  
T +1 9724035800  
1-800-879-8000 toll free - F +1 918 254 0522

#### Department issuing data specification sheet

Hilti AG  
Feldkircherstraße 100  
9494 Schaan - Liechtenstein  
T +423 234 2111  
[chemicals.hse@hilti.com](mailto:chemicals.hse@hilti.com)

### 1.4. Emergency telephone number

Emergency number	Chem-Trec Tel.: 1 800 424 9300 (USA, PR, Virgin Islands, Canada) Tel.: 703 527 3887 (Other countries) +1 918 8723000 1-800-879-8000 toll free
------------------	---

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### GHS-US classification

Skin Irrit. 2	H315 - Causes skin irritation
Eye Irrit. 2A	H319 - Causes serious eye irritation
Resp. Sens. 1	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
Skin Sens. 1	H317 - May cause an allergic skin reaction
Carc. 2	H351 - Suspected of causing cancer
STOT SE 3	H335 - May cause respiratory irritation
STOT RE 2	H373 - May cause damage to organs through prolonged or repeated exposure

Full text of H-statements: see section 16

### 2.2. Label elements

#### GHS-US labelling

Hazard pictograms (GHS-US)



## CFS-F SOL / CP 620, B

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Signal word (GHS-US)	Danger
Hazard statements (GHS-US)	H315 - Causes skin irritation H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled H335 - May cause respiratory irritation H351 - Suspected of causing cancer H373 - May cause damage to organs through prolonged or repeated exposure
Precautionary statements (GHS-US)	P260 - Do not breathe vapours P280 - Wear eye protection, protective clothing, protective gloves P302+P352 - If on skin: Wash with plenty of water P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P342+P311 - If experiencing respiratory symptoms: Call a doctor, a POISON CENTER P284 - In case of inadequate ventilation wear respiratory protection

**2.3. Other hazards**

No additional information available

**2.4. Unknown acute toxicity (GHS US)**

Not applicable

**SECTION 3: Composition/information on ingredients****3.1. Substance**

Not applicable

**3.2. Mixture**

Name	Product identifier	%	GHS-US classification
4,4'-diphenylmethanediisocyanate, isomeres and homologues	(CAS No) 9016-87-9	54 - 90	Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373
tris(2-chloro-1-methylethyl) phosphate	(CAS No) 13674-84-5	5 - 10	Acute Tox. 4 (Oral), H302

Full text of H-statements: see section 16

**SECTION 4: First aid measures****4.1. Description of first aid measures**

First-aid measures general	IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact	Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	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.
First-aid measures after ingestion	Call a poison center or a doctor if you feel unwell.

**4.2. Most important symptoms and effects, both acute and delayed**

Symptoms/injuries after inhalation	May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/injuries after skin contact	Irritation. May cause an allergic skin reaction.
Symptoms/injuries after eye contact	Eye irritation.

**4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

# CFS-F SOL / CP 620, B

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media Water spray. Dry powder. Foam. Carbon dioxide.

#### 5.2. Special hazards arising from the substance or mixture

Reactivity The product is non-reactive under normal conditions of use, storage and transport.

#### 5.3. Advice for firefighters

Protection during firefighting Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

##### 6.1.2. For emergency responders

Protective equipment Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.

Hygiene measures Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Storage temperature 41 - 77 °F

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

# CFS-F SOL / CP 620, B

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 8.2. Exposure controls

Appropriate engineering controls

Ensure good ventilation of the work station.

Personal protective equipment

Gloves. Protective clothing. Safety glasses.



Hand protection

Wear impervious gloves.

Eye protection

Safety glasses.

Skin and body protection

Wear suitable protective clothing.

Respiratory protection

Wear respiratory protection.

Environmental exposure controls

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	Liquid
Colour	amber
Odour	There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odour(s): Stuffy odour Mild odour Characteristic odour
Odour threshold	No data available
pH	No data available
Melting point	Not applicable
Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Relative evaporation rate (butylacetate=1)	No data available
Flammability (solid, gas)	No data available
Explosive limits	No data available
Explosive properties	No data available
Oxidising properties	No data available
Vapour pressure	No data available
Relative density	No data available
Relative vapour density at 20 °C	No data available
Density	≈ g/cm <sup>3</sup>
Solubility	No data available
Log Pow	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

# CFS-F SOL / CP 620, B

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity

Inhalation:dust,mist: Not classified.

4,4'-diphenylmethanediisocyanate, isomeres and homologues (9016-87-9)	
LD50 oral rat	> 10000 mg/kg (Rat; Literature study)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit; Literature study)
ATE US (gases)	4500.000 ppmv/4h
ATE US (vapours)	11.000 mg/l/4h
ATE US (dust,mist)	1.500 mg/l/4h

tris(2-chloro-1-methylethyl) phosphate (13674-84-5)	
LD50 oral rat	2800 - 4200 mg/kg bodyweight (Rat; Equivalent or similar to OECD 401; Experimental value; 1011-1824 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rat	> 2000 mg/kg (Rat; Experimental value)
LD50 dermal rabbit	> 2000 mg/kg bodyweight (Rabbit; Experimental value; OECD 402: Acute Dermal Toxicity)
ATE US (oral)	500.000 mg/kg bodyweight

Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory or skin sensitisation	May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
Carcinogenicity	Suspected of causing cancer.

4,4'-diphenylmethanediisocyanate, isomeres and homologues (9016-87-9)	
IARC group	3 - Not classifiable

Reproductive toxicity	Not classified
Specific target organ toxicity (single exposure)	May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	Not classified
Symptoms/injuries after inhalation	May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/injuries after skin contact	Irritation. May cause an allergic skin reaction.
Symptoms/injuries after eye contact	Eye irritation.



## CFS-F SOL / CP 620, B

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**SECTION 12: Ecological information****12.1. Toxicity**

Ecology - general

The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

**4,4'-diphenylmethanediisocyanate, isomeres and homologues (9016-87-9)**

LC50 other aquatic organisms 1 &gt; 1000 mg/l (96 h)

Threshold limit other aquatic organisms 1 &gt; 1000 mg/l (96 h)

**tris(2-chloro-1-methylethyl) phosphate (13674-84-5)**

LC50 fish 1 98 mg/l (96 h; Pimephales promelas; GLP)

EC50 Daphnia 1 65 - 335 mg/l (48 h; Daphnia magna; GLP)

LC50 fish 2 56.2 mg/l (96 h; Brachydanio rerio)

Threshold limit algae 1 73 mg/l (96 h; Selenastrum capricornutum; Growth rate)

**12.2. Persistence and degradability****4,4'-diphenylmethanediisocyanate, isomeres and homologues (9016-87-9)**

Persistence and degradability Not readily biodegradable in water. Hydrolysis in water. No (test) data on mobility of the substance available.

**tris(2-chloro-1-methylethyl) phosphate (13674-84-5)**

Persistence and degradability Not readily biodegradable in water. No (test) data on mobility of the substance available.

**12.3. Bioaccumulative potential****4,4'-diphenylmethanediisocyanate, isomeres and homologues (9016-87-9)**

BCF fish 1 1 (Pisces)

Bioaccumulative potential Not bioaccumulative.

**tris(2-chloro-1-methylethyl) phosphate (13674-84-5)**

BCF fish 1 0.8 - 4.6 (Cyprinus carpio; Test duration: 6 weeks)

Log Pow 2.59 (Experimental value)

Bioaccumulative potential Low potential for bioaccumulation (BCF &lt; 500).

**12.4. Mobility in soil**

No additional information available

**12.5. Other adverse effects**

Effect on the global warming

No known ecological damage caused by this product.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

Waste treatment methods

Dispose of contents/container in accordance with licensed collector's sorting instructions.

Waste disposal recommendations

Dispose in a safe manner in accordance with local/national regulations.

**SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / ADN

**14.1. UN number**

Not regulated for transport

**14.2. UN proper shipping name**

Proper Shipping Name (ADR)

Not applicable

# CFS-F SOL / CP 620, B

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Proper Shipping Name (IMDG)	Not applicable
Proper Shipping Name (IATA)	Not applicable
Proper Shipping Name (ADN)	Not applicable
Proper Shipping Name (RID)	Not applicable

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR)	Not applicable
----------------------------------	----------------

#### IMDG

Transport hazard class(es) (IMDG)	Not applicable
-----------------------------------	----------------

#### IATA

Transport hazard class(es) (IATA)	Not applicable
-----------------------------------	----------------

#### ADN

Transport hazard class(es) (ADN)	Not applicable
----------------------------------	----------------

#### RID

Transport hazard class(es) (RID)	Not applicable
----------------------------------	----------------

### 14.4. Packing group

Packing group (ADR)	Not applicable
Packing group (IMDG)	Not applicable
Packing group (IATA)	Not applicable
Packing group (ADN)	Not applicable
Packing group (RID)	Not applicable

### 14.5. Environmental hazards

Dangerous for the environment	No
Marine pollutant	No
Other information	No supplementary information available

### 14.6. Special precautions for user

#### - Overland transport

#### - Transport by sea

No data available

#### - Air transport

No data available

#### - Inland waterway transport

Carriage prohibited (ADN)	No
Not subject to ADN	No

#### - Rail transport

Carriage prohibited (RID)	No
---------------------------	----

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

# CFS-F SOL / CP 620, B

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

No additional information available

#### 15.2. International regulations

##### CANADA

No additional information available

##### EU-Regulations

No additional information available

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. 4 (Oral) H302

Skin Irrit. 2 H315

Eye Irrit. 2 H319

Resp. Sens. 1 H334

Skin Sens. 1 H317

Carc. 2 H351

STOT SE 3 H335

STOT RE 2 H373

Full text of hazard classes and H-statements : see section 16

##### National regulations

No additional information available

#### 15.3. US State regulations

No additional information available

### SECTION 16: Other information

Revision date

04/26/2016

Full text of H-statements:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Resp. Sens. 1	Sensitisation — Respiratory, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H302	Harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H332	Harmful if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H351	Suspected of causing cancer
H373	May cause damage to organs through prolonged or repeated exposure

# CFS-F SOL / CP 620, B

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

---

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*