

# HFX

## Safety information for 2-Component-products

Date of issue: 23/11/2015

Revision date: 23/11/2015

Supersedes: 07/04/2015

Version: 8.1

### SECTION 1: Kit identification

#### 1.1 Product identifier

Trade name

HFX



Product code

BU Anchor

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

Hilti (Aust.) Pty. Ltd.  
 Level 5, 1G Homebush Bay Drive  
 2138 Rhodes - Australia  
 T +61 131 292 - F +61 1300 135 042  
[serviceaustralia@hilti.com](mailto:serviceaustralia@hilti.com)

### SECTION 2: General information

Storage

Storage temperature: 5 - 25 °C

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

This Kit should be handled in accordance with good laboratory practices and appropriate personal protective equipment should be used

### SECTION 3:

#### Classification of the Product

##### Classification according to the United Nations GHS (Rev. 4, 2011)

Skin Irrit. 2	H315
Eye Irrit. 2	H319
Skin Sens. 1	H317
Repr. 1B	H360
Aquatic Acute 1	H400
Aquatic Chronic 3	H412

#### Label elements

##### Labelling according to the United Nations GHS (Rev. 4, 2011)

Hazard pictograms (GHS-UN)



GHS07

GHS08

GHS09

Signal word (GHS-UN)

Danger

Hazardous ingredients

methacrylates, dibenzoyl peroxide, boric acid

Hazard statements (GHS-UN)

H315 - Causes skin irritation  
 H317 - May cause an allergic skin reaction  
 H319 - Causes serious eye irritation  
 H360 - May damage fertility or the unborn child  
 H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (GHS-UN)

P262 - Do not get in eyes, on skin, or on clothing  
 P280 - Wear eye protection, protective clothing, protective gloves  
 P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

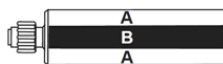
# HFX

## Safety information for 2-Component-products

P302+P352 - IF ON SKIN: Wash with plenty of soap and water  
 P333+P313 - If skin irritation or rash occurs: Get medical advice/attention  
 P337+P313 - If eye irritation persists: Get medical advice/attention

### Additional information

Plastic-cartridge, contains:  
 Methacrylate resin, inorganic filler  
 Dibenzoyl peroxide, phlegmatized



Name	General description	Quantity	Unit	Classification according to the United Nations GHS (Rev. 4, 2011)
HFX, A		1	pcs (pieces)	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Repr. 1B, H360 Aquatic Chronic 3, H412
HFX, B		1	pcs (pieces)	Skin Sens. 1, H317 Aquatic Acute 1, H400

### SECTION 4: General advice

General advice For professional users only

### SECTION 5: Safe handling advice

Environmental precautions	Prevent entry to sewers and public waters Notify authorities if liquid enters sewers or public waters
Storage conditions	Keep cool. Protect from sunlight
Precautions for safe handling	Wear personal protective equipment Avoid contact with skin and eyes Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work Provide good ventilation in process area to prevent formation of vapour
Methods for cleaning up	This material and its container must be disposed of in a safe way, and as per local legislation Store away from other materials
For containment	Collect spillage
Incompatible materials	Sources of ignition Direct sunlight
Incompatible products	Strong bases Strong acids

### SECTION 6: First aid measures

First-aid measures after eye contact	Rinse immediately with plenty of water Remove contact lenses, if present and easy to do. Continue rinsing Obtain medical attention if pain, blinking or redness persist
First-aid measures after ingestion	Rinse mouth Do NOT induce vomiting Drink plenty of water Get medical advice/attention
First-aid measures after inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing Allow breathing of fresh air Allow the victim to rest
First-aid measures after skin contact	Wash with plenty of soap and water Wash contaminated clothing before reuse If skin irritation occurs: Get medical advice/attention

# HFX

## Safety information for 2-Component-products

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First-aid measures general

Never give anything by mouth to an unconscious person  
If you feel unwell, seek medical advice (show the label where possible)

Symptoms/injuries after eye contact

Causes serious eye irritation

Symptoms/injuries after skin contact

May cause an allergic skin reaction

### SECTION 7: Fire fighting measures

Firefighting instructions

Use water spray or fog for cooling exposed containers  
Exercise caution when fighting any chemical fire  
Prevent fire-fighting water from entering environment

Protection during firefighting

Do not enter fire area without proper protective equipment, including respiratory protection

Hazardous decomposition products in case of fire

Thermal decomposition generates :  
Carbon dioxide  
Carbon monoxide

### SECTION 8: Other information

No data available

# HFX, B

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

Date of issue: 23/11/2015

Version: 8.1

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### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form	Mixture
Name	HFX, B
Product code	BU Anchor

#### 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

Hilti (Aust.) Pty. Ltd.  
 Level 5, 1G Homebush Bay Drive  
 2138 Rhodes - Australia  
 T +61 131 292 - F +61 1300 135 042  
[serviceaustralia@hilti.com](mailto:serviceaustralia@hilti.com)

##### Department issuing data specification sheet

Hilti Entwicklungsgesellschaft mbH  
 Hiltistrasse 6  
 86916 Kaufering - Deutschland  
 T +49 8191 906310 - F +49 8191 90176310  
[anchor.hse@hilti.com](mailto:anchor.hse@hilti.com)

#### 1.4. Emergency telephone number

Emergency number	Schweizerisches Toxikologisches Informationszentrum – 24h Service +41 44 251 51 51 (international) +61 2 8748 1000
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### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to the United Nations GHS (Rev. 4, 2011)

Org. Perox. Not classified

Skin Sens. 1	H317
Aquatic Acute 1	H400

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

#### 2.2. Label elements

##### Labelling according to the United Nations GHS (Rev. 4, 2011)

Hazard pictograms (GHS-UN)



GHS07

GHS09

Signal word (GHS-UN)

Warning

Hazardous ingredients

dibenzoyl peroxide

Hazard statements (GHS-UN)

H317 - May cause an allergic skin reaction  
 H400 - Very toxic to aquatic life

Precautionary statements (GHS-UN)

P280 - Wear eye protection, protective clothing, protective gloves  
 P262 - Do not get in eyes, on skin, or on clothing  
 P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P333+P313 - If skin irritation or rash occurs: Get medical advice/attention  
 P337+P313 - If eye irritation persists: Get medical advice/attention  
 P302+P352 - IF ON SKIN: Wash with plenty of water

# HFX, B

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	Classification according to the United Nations GHS (Rev. 4, 2011)
dibenzoyl peroxide	(CAS No) 94-36-0	5 - 10	Org. Perox. B, H241 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=10)

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	Remove/Take off immediately all contaminated clothing. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Allow breathing of fresh air. Allow the victim to rest.
First-aid measures after skin contact	Wash contaminated clothing before reuse. Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion	Rinse mouth. Drink plenty of water. Get medical advice/attention. Do not induce vomiting. Obtain emergency medical attention.

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

Symptoms/injuries after skin contact	May cause an allergic skin reaction.
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### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	Water spray. Carbon dioxide. Dry powder. Foam. Sand.
Unsuitable extinguishing media	Do not use a heavy water stream.

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

No additional information available

### 5.3. Advice for firefighters

Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	Self-contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.

# HFX, B

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

### SECTION 6: Accidental release measures

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

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

Emergency procedures Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

Protective equipment Use personal protective equipment as required. Equip cleanup crew with proper protection.  
Emergency procedures Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

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

For containment Collect spillage.  
Methods for cleaning up This material and its container must be disposed of in a safe way, and as per local legislation. Recover mechanically the product. Store away from other materials.  
Other information Dispose of materials or solid residues at an authorized site.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling Wear personal protective equipment. Avoid contact with skin and eyes. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.  
Hygiene measures Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

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

Storage conditions Keep cool. Protect from sunlight.  
Incompatible products Strong bases. Strong acids.  
Incompatible materials Sources of ignition. Direct sunlight.  
Storage temperature 5 - 25 °C

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

dibenzoyl peroxide (94-36-0)		
Australia	Local name	Benzoyl peroxide
Australia	TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>

Additional information The product has a pasty consistency. Exposure limit values for respirable dusts are not relevant for this product.

#### 8.2. Exposure controls

Personal protective equipment Avoid all unnecessary exposure. Safety glasses. Gloves. Protective clothing.



Hand protection Wear protective gloves.  
Eye protection Chemical goggles or safety glasses.

# HFX, B

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

Skin and body protection	Wear suitable protective clothing.
Environmental exposure controls	Avoid release to the environment.
Consumer exposure controls	Avoid contact during pregnancy/while nursing.
Other information	Do not eat, drink or smoke during use.

### SECTION 9: Physical and chemical properties

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

Physical state	Solid
Appearance	Thixotropic paste.
Colour	white.
Odour	characteristic.
Odour threshold	Not determined
pH	No data available
Relative evaporation rate (butylacetate=1)	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Auto-ignition temperature	Not self-igniting
Decomposition temperature	No data available
Flammability (solid, gas)	Non flammable
Vapour pressure	No data available
Relative vapour density at 20 °C	No data available
Relative density	No data available
Density	1.7 g/cm <sup>3</sup> AW 4.3.23
Solubility	Water: Not miscible
Log Pow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	90 Pa.s HN-0333
Explosive properties	Product is not explosive.
Oxidising properties	No data available
Explosive limits	No data available

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No additional information available.

#### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

# HFX, B

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

### 10.5. Incompatible materials

Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. 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 (oral) Not classified

<b>dibenzoyl peroxide (94-36-0)</b>	
LD50 oral rat	> 5000 mg/kg bodyweight (Rat; Equivalent or similar to OECD 401; Weight of evidence)
Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Not classified
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration hazard	Not classified

<b>HFX, B</b>	
Viscosity, kinematic	52941.17647059 mm <sup>2</sup> /s

Potential adverse human health effects and symptoms Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

### 12.1. Toxicity

<b>dibenzoyl peroxide (94-36-0)</b>	
LC50 fish 1	2 mg/l (96 h; <i>Poecilia reticulata</i> )
EC50 Daphnia 1	0.07 mg/l
LC50 fish 2	0.0602 mg/l (96h; <i>Oncorhynchus mykiss</i> ; ECHA)
NOEC (acute)	0.0316 mg/l (96h; <i>Oncorhynchus mykiss</i> ; ECHA)

### 12.2. Persistence and degradability

<b>HFX, B</b>	
Persistence and degradability	Not established.

<b>dibenzoyl peroxide (94-36-0)</b>	
Persistence and degradability	Readily biodegradable in water. No (test)data on mobility of the substance available.

### 12.3. Bioaccumulative potential

<b>HFX, B</b>	
Bioaccumulative potential	Not established.

<b>dibenzoyl peroxide (94-36-0)</b>	
Log Pow	3.71 (QSAR; 3.2; Experimental value; OECD 117: Partition Coefficient (n-octanol/water), HPLC method; 22 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).



# HFX, B

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Other information Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste)	Disposal must be done according to official regulations.
Waste disposal recommendations	Refer to manufacturer/supplier for information on recovery/recycling. Dispose of contents/container to Avoid release to the environment, Refer to manufacturer/supplier for information on recovery/recycling.
Ecology - waste materials	Avoid release to the environment.

## SECTION 14: Transport information

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

ADR	IMDG	IATA	RID
<b>14.1. UN number</b>			
Not regulated for transport			
<b>14.2. UN proper shipping name</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>			
Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>			
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
ADR 5.2.1.8.1 derogation applies (quantity of liquids ≤ 5 litres or net mass of solids ≤ 5 kg)			
No supplementary information available			

### 14.6. Special precautions for user

- Overland transport

- Transport by sea

No data available

- Air transport

No data available

- Rail transport

Carriage prohibited (RID) No

# HFX, B

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

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

**SECTION 15: Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

No additional information available

**SECTION 16: Other information**

Other information None.

Full text of H-statements:

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Org. Perox. B	Organic Peroxides, Type B
Org. Perox. Not classified	Organic peroxide Not classified
Skin Sens. 1	Sensitisation — Skin, Category 1
H241	Heating may cause a fire or explosion
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H400	Very toxic to aquatic life

SDS\_UN\_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*

# HFX, A

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

Date of issue: 23/11/2015

Version: 8.1

Revision date: 23/11/2015

Supersedes: 07/04/2015

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form	Mixture
Name	HFX, A
Product code	BU Anchor

#### 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

Hilti (Aust.) Pty. Ltd.  
 Level 5, 1G Homebush Bay Drive  
 2138 Rhodes - Australia  
 T +61 131 292 - F +61 1300 135 042  
[serviceaustralia@hilti.com](mailto:serviceaustralia@hilti.com)

##### Department issuing data specification sheet

Hilti Entwicklungsgesellschaft mbH  
 Hiltistrasse 6  
 86916 Kaufering - Deutschland  
 T +49 8191 906310 - F +49 8191 90176310  
[anchor.hse@hilti.com](mailto:anchor.hse@hilti.com)

#### 1.4. Emergency telephone number

Emergency number	Schweizerisches Toxikologisches Informationszentrum – 24h Service +41 44 251 51 51 (international) +61 2 8748 1000
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### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to the United Nations GHS (Rev. 4, 2011)

Skin Irrit. 2	H315
Eye Irrit. 2A	H319
Skin Sens. 1	H317
Repr. 1B	H360
Aquatic Chronic 3	H412

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

#### 2.2. Label elements

##### Labelling according to the United Nations GHS (Rev. 4, 2011)

Hazard pictograms (GHS-UN)



GHS07

GHS08

Signal word (GHS-UN)

Danger

Hazardous ingredients

2-Hydroxypropyl methacrylate, boric acid

Hazard statements (GHS-UN)

H315 - Causes skin irritation  
 H317 - May cause an allergic skin reaction  
 H319 - Causes serious eye irritation  
 H360 - May damage fertility or the unborn child  
 H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (GHS-UN)

P201 - Obtain special instructions before use  
 P202 - Do not handle until all safety precautions have been read and understood  
 P261 - Avoid breathing dust/fume/gas/mist/vapours/spray  
 P264 - Wash ... thoroughly after handling  
 P272 - Contaminated work clothing should not be allowed out of the workplace  
 P273 - Avoid release to the environment

# HFX, A

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

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  
 P321 - Specific treatment (see ... on this label)  
 P332+P313 - If skin irritation occurs: Get medical advice/attention  
 P333+P313 - If skin irritation or rash occurs: Get medical advice/attention  
 P337+P313 - If eye irritation persists: Get medical advice/attention  
 P362+P364 - Take off contaminated clothing and wash it before reuse  
 P405 - Store locked up  
 P501 - Dispose of contents/container to ...

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	Classification according to the United Nations GHS (Rev. 4, 2011)
2-Hydroxypropyl methacrylate	(CAS No) 27813-02-1	10 - 25	Eye Irrit. 2A, H319 Skin Sens. 1, H317
Bisphenol-A-diehoxy-methacrylate	(CAS No) 24448-20-2	5 - 10	Flam. Liq. Not classified Skin Irrit. 2, H315 Eye Irrit. 2A, H319
Tricyclodecane dimethanol dimethacrylate	(CAS No) 43048-08-4	2.5 - 5	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
1,1,1-Trimethylolpropane trimethacrylate	(CAS No) 3290-92-4	2.5 - 5	Flam. Liq. Not classified Acute Tox. Not classified (Oral) Aquatic Acute 2, H401 Aquatic Chronic 2, H411
1,1'-(p-tolylimino)dipropan-2-ol	(CAS No) 38668-48-3	0.1 - 1	Acute Tox. 2 (Oral), H300 Eye Irrit. 2A, H319 Aquatic Acute 3, H402 Aquatic Chronic 3, H412
boric acid	(CAS No) 10043-35-3	0.1 - 1	Acute Tox. 5 (Oral), H303 Repr. 1B, H360 Aquatic Acute 3, H402
4-tert-butylpyrocatechol	(CAS No) 98-29-3	0.1 - 1	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 2, H411

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	Remove/Take off immediately all contaminated clothing. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Allow breathing of fresh air. Allow the victim to rest.
First-aid measures after skin contact	Wash contaminated clothing before reuse. Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

# HFX, A

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

First-aid measures after eye contact	Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion	Rinse mouth. Drink plenty of water. Get medical advice/attention. Do not induce vomiting. Obtain emergency medical attention.

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

Symptoms/injuries after skin contact	May cause an allergic skin reaction.
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### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	Water spray. Carbon dioxide. Dry powder. Foam. Sand.
Unsuitable extinguishing media	Do not use a heavy water stream.

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

No additional information available

### 5.3. Advice for firefighters

Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	Self-contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

Emergency procedures	Evacuate unnecessary personnel.
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#### 6.1.2. For emergency responders

Protective equipment	Use personal protective equipment as required. Equip cleanup crew with proper protection.
Emergency procedures	Ventilate area.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

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

For containment	Collect spillage.
Methods for cleaning up	This material and its container must be disposed of in a safe way, and as per local legislation. Recover mechanically the product. Store away from other materials.
Other information	Dispose of materials or solid residues at an authorized site.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling	Wear personal protective equipment. Avoid contact with skin and eyes. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.
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# HFX, A

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

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

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

Storage conditions	Keep cool. Protect from sunlight.
Incompatible products	Strong bases. Strong acids.
Incompatible materials	Sources of ignition. Direct sunlight.
Storage temperature	5 - 25 °C

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Additional information The product has a pasty consistency. Exposure limit values for respirable dusts are not relevant for this product.

### 8.2. Exposure controls

Personal protective equipment Avoid all unnecessary exposure. Safety glasses. Gloves. Protective clothing.



Hand protection	Wear protective gloves.
Eye protection	Chemical goggles or safety glasses.
Skin and body protection	Wear suitable protective clothing.
Environmental exposure controls	Avoid release to the environment.
Consumer exposure controls	Avoid contact during pregnancy/while nursing.
Other information	Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

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

Physical state	Solid
Appearance	Thixotropic paste.
Colour	light brown.
Odour	characteristic.
Odour threshold	Not determined
pH	No data available
Relative evaporation rate (butylacetate=1)	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	101 °C DIN 53213
Auto-ignition temperature	Not self-igniting
Decomposition temperature	No data available
Flammability (solid, gas)	Non flammable
Vapour pressure	No data available
Relative vapour density at 20 °C	No data available
Relative density	No data available
Density	1.66 g/ml DIN 51757

# HFX, A

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

Solubility	Water: Not miscible
Log Pow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	80 Pa.s HN-0333
Explosive properties	Product is not explosive.
Oxidising properties	No data available
Explosive limits	No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No additional information available.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. 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 (oral) Not classified

<b>2-Hydroxypropyl methacrylate (27813-02-1)</b>	
LD50 oral rat	> 5000 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; >=2000 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	>= 5000 mg/kg bodyweight (Rabbit; Experimental value)
<b>1,1,1-Trimethylolpropane trimethacrylate (3290-92-4)</b>	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 3000 mg/kg
<b>1,1'-(p-tolylimino)dipropen-2-ol (38668-48-3)</b>	
LD50 oral rat	25 mg/kg
LD50 dermal rat	> 2000 mg/kg
<b>boric acid (10043-35-3)</b>	
LD50 oral rat	2660 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; >2600 mg/kg bodyweight; Rat; Experimental value)
LD50 oral	3241 mg/kg
LD50 dermal rabbit	> 2000 mg/kg Rabbit; Experimental value; FIFRA (40 CFR)
<b>4-tert-butylpyrocatechol (98-29-3)</b>	
LD50 oral rat	815 mg/kg bodyweight (Rat; Lethal; ECHA)
LD50 dermal rat	1331 mg/kg bodyweight (Rat; Lethal; ECHA)

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LD50 dermal rabbit	(Rabbit)
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	May damage 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

<b>HFX, A</b>	
Viscosity, kinematic	48192.77108434 mm <sup>2</sup> /s

Potential adverse human health effects and symptoms      Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

### 12.1. Toxicity

<b>2-Hydroxypropyl methacrylate (27813-02-1)</b>	
LC50 fish 1	493 mg/l (48 h; Leuciscus idus; GLP)
EC50 Daphnia 1	> 143 mg/l (48 h; Daphnia magna; GLP)
Threshold limit algae 1	> 97.2 mg/l (72 h; Pseudokirchneriella subcapitata; GLP)
Threshold limit algae 2	> 97.2 mg/l (72 h; Pseudokirchneriella subcapitata; GLP)
<b>1,1,1-Trimethylolpropane trimethacrylate (3290-92-4)</b>	
LC50 fish 1	2 mg/l
ErC50 (algae)	3.88 mg/l
NOEC chronic fish	0.138 mg/l
NOEC chronic crustacea	0.177 mg/l
<b>1,1'-(p-tolylimino)dipropen-2-ol (38668-48-3)</b>	
LC50 fish 1	≈ 17 mg/l
LC50 other aquatic organisms 1	245 mg/l
EC50 Daphnia 1	28.8 mg/l
NOEC (acute)	57.8 mg/l
<b>boric acid (10043-35-3)</b>	
LC50 fish 1	447 mg/l
EC50 Daphnia 1	658 - 875 mg/l (48 h; Daphnia magna)
LC50 fish 2	79 ppm (96 h; Salmo gairdneri (Oncorhynchus mykiss); Hard water)
EC50 Daphnia 2	19.7 mg/l (336 h; Daphnia magna)
TLM fish 1	1800 ppm (24 h; Gambusia affinis)
Threshold limit algae 1	5 mg/l (672 h; Elodea sp.)
Threshold limit algae 2	0.4 - 0.8,336 h; Chlorella sp.; Growth
<b>4-tert-butylpyrocatechol (98-29-3)</b>	
LC50 fish 1	0.12 mg/l (96 h, Danio rerio, Lethal, ECHA)
EC50 Daphnia 1	> µg/l

### 12.2. Persistence and degradability

<b>HFX, A</b>	
Persistence and degradability	Not established.
<b>2-Hydroxypropyl methacrylate (27813-02-1)</b>	
Persistence and degradability	Readily biodegradable in water. No (test)data on mobility of the substance available.
<b>boric acid (10043-35-3)</b>	
Persistence and degradability	Biodegradability: not applicable. Biodegradability in soil: not applicable. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable





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ADR	IMDG	IATA	RID
<b>14.3. Transport hazard class(es)</b>			
Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>			
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available			

### 14.6. Special precautions for user

- Overland transport

- Transport by sea

No data available

- Air transport

No data available

- 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. Safety, health and environmental regulations/legislation specific for the substance or mixture

No additional information available

## SECTION 16: Other information

Other information None.

Full text of H-statements:

Acute Tox. 2 (Oral)	Acute toxicity (oral), Category 2
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Acute Tox. 5 (Oral)	Acute toxicity (oral), Category 5
Acute Tox. Not classified (Oral)	Acute toxicity (oral) Not classified
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Acute 2	Hazardous to the aquatic environment — Acute Hazard, Category 2
Aquatic Acute 3	Hazardous to the aquatic environment — Acute Hazard, Category 3
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Flam. Liq. Not classified	Flammable liquids Not classified
Repr. 1B	Reproductive toxicity, Category 1B
Skin Corr. 1B	Skin corrosion/irritation, Category 1B

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Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H300	Fatal if swallowed
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H360	May damage fertility or the unborn child
H400	Very toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

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*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*