

HFX

Safety information for 2-Component-products

Date of issue: 23/11/2015

Revision date: 23/11/2015

Supersedes: 18/05/2015

Version: 8.2

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 (Canada) Corp.
 2360 Meadowpine Boulevard
 L5N 6S2 Mississauga, Ontario - Canada
 T +1905 8139200
 1-800-363-4458 toll free - F +1 905 813 9009

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: Kit contents

Classification of the Product

Classification (GHS-CA)

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

GHS-CA labelling

Hazard pictograms (GHS-CA)



GHS07

GHS08

GHS09

Signal word (GHS-CA)

Danger

Hazardous ingredients

methacrylates, dibenzoyl peroxide, boric acid

Hazard statements (GHS-CA)

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-CA)

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

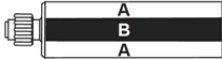
HFX

Safety information for 2-Component-products

contact lenses, if present and easy to do. Continue rinsing
 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 (GHS-CA)
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:

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Safety information for 2-Component-products

First-aid measures general	Get medical advice/attention 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 Hazardous Products Regulation (February 11, 2015)

Date of issue: 11/23/2015

Revision date: 11/23/2015

Supersedes: 05/18/2015

Version: 8.2

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 (Canada) Corp.
2360 Meadowpine Boulevard
L5N 6S2 Mississauga, Ontario - Canada
T +1905 8139200
1-800-363-4458 toll free - F +1 905 813 9009

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

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)
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-CA)

Sensitisation — Skin, Category 1 H317
Full text of H-statements: see section 16

2.2. Label elements

GHS-CA labelling

Hazard pictograms (GHS-CA)



GHS07

Signal word (GHS-CA)

Warning

Hazard statements (GHS-CA)

H317 - May cause an allergic skin reaction

Precautionary statements (GHS-CA)

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

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

HFX, B

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Name	Product identifier	%	Classification (GHS-CA)
dibenzoyl peroxide	(CAS No) 94-36-0	5 - 10	Organic Peroxides, Type B, H241 Serious eye damage/eye irritation, Category 2A, H319 Sensitisation — Skin, Category 1, H317

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.

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.

HFX, B

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

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

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

HFX, B

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

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 ³ 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.

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 Not classified

HFX, B

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

dibenzoyl peroxide (94-36-0)	
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 classifiedBased on available data, the classification criteria are not met
Carcinogenicity	Not classified

dibenzoyl peroxide (94-36-0)	
IARC group	3
Reproductive toxicity	Not classifiedBased on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classifiedBased on available data, the classification criteria are not met
Aspiration hazard	Not classifiedBased on available data, the classification criteria are not met

HFX, B	
Viscosity, kinematic	52941.17647059 mm ² /s
Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.
Symptoms/injuries after skin contact	May cause an allergic skin reaction.

SECTION 12: Ecological information

12.1. Toxicity

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

12.2. Persistence and degradability

HFX, B	
Persistence and degradability	Not established.

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

12.3. Bioaccumulative potential

HFX, B	
Bioaccumulative potential	Not established.

dibenzoyl peroxide (94-36-0)	
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).

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.

HFX, B

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

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
14.1. UN number			
Not regulated for transport			
14.2. UN proper shipping name			
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
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

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

SECTION 15: Regulatory information

National/international regulations

No additional information available

SECTION 16: Other information

SDS Major/Minor None
Date of issue 23/11/2015

HFX, B

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Revision date 23/11/2015

Supersedes 18/05/2015

Indication of changes:

Other information None.

Full text of H-statements:

H241	Heating may cause a fire or explosion
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation

SDS_CA_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 Hazardous Products Regulation (February 11, 2015)

Date of issue: 11/23/2015 Revision date: 11/23/2015 Supersedes: 05/18/2015 Version: 8.2

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 (Canada) Corp. 2360 Meadowpine Boulevard L5N 6S2 Mississauga, Ontario - Canada T +1905 8139200 1-800-363-4458 toll free - F +1 905 813 9009	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
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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)
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-CA)

Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2A	H319
Sensitisation — Skin, Category 1	H317
Reproductive toxicity, Category 1B	H360
Full text of H-statements: see section 16	

2.2. Label elements

GHS-CA labelling

Hazard pictograms (GHS-CA)



Signal word (GHS-CA)

Danger

Hazard statements (GHS-CA)

H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H360 - May damage fertility or the unborn child

Precautionary statements (GHS-CA)

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, A

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

Name	Product identifier	%	Classification (GHS-CA)
Quartz	(CAS No) 14808-60-7	25 - 40	Not classified
2-Hydroxypropyl methacrylate	(CAS No) 27813-02-1	10 - 25	Serious eye damage/eye irritation, Category 2A, H319 Sensitisation — Skin, Category 1, H317
Bisphenol-A-diethoxy-methacrylate	(CAS No) 24448-20-2	5 - 10	Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 2A, H319
Tricyclodecane dimethanol dimethacrylate	(CAS No) 43048-08-4	2.5 - 5	Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 2A, H319 Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation, H335
1,1,1-Trimethylolpropane trimethacrylate	(CAS No) 3290-92-4	2.5 - 5	Not classified
1,1'-(p-tolylimino)dipropan-2-ol	(CAS No) 38668-48-3	0.1 - 1	Acute toxicity (oral), Category 2, H300 Serious eye damage/eye irritation, Category 2A, H319
boric acid	(CAS No) 10043-35-3	0.1 - 1	Reproductive toxicity, Category 1B, H360
4-tert-butylpyrocatechol	(CAS No) 98-29-3	0.1 - 1	Acute toxicity (oral), Category 4, H302 Acute toxicity (dermal), Category 4, H312 Skin corrosion/irritation, Category 1B, H314 Sensitisation — Skin, Category 1, H317

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

HFX, A

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

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.
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

HFX, A

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

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
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

HFX, A

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

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

Not classified

2-Hydroxypropyl methacrylate (27813-02-1)	
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)
1,1,1-Trimethylolpropane trimethacrylate (3290-92-4)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 3000 mg/kg
1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)	
LD50 oral rat	25 mg/kg
LD50 dermal rat	> 2000 mg/kg
ATE US (oral)	25.000 mg/kg bodyweight
boric acid (10043-35-3)	
LD50 oral rat	2660 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; >2600 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	> 2000 mg/kg Rabbit; Experimental value; FIFRA (40 CFR)
ATE US (oral)	2660.000 mg/kg bodyweight
4-tert-butylpyrocatechol (98-29-3)	
LD50 oral rat	815 mg/kg bodyweight (Rat; Lethal; ECHA)
LD50 dermal rat	1331 mg/kg bodyweight (Rat;Lethal; ECHA)
LD50 dermal rabbit	(Rabbit)
ATE US (oral)	815.000 mg/kg bodyweight
ATE US (dermal)	1331.000 mg/kg bodyweight

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 classifiedBased on available data, the classification criteria are not met

HFX, A

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Carcinogenicity	Not classified
Reproductive toxicity	May damage fertility or the unborn child. Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified Based on available data, the classification criteria are not met
Aspiration hazard	Not classified Based on available data, the classification criteria are not met

HFX, A	
Viscosity, kinematic	48192.77108434 mm ² /s

Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.
Symptoms/injuries after skin contact	May cause an allergic skin reaction.

SECTION 12: Ecological information

12.1. Toxicity

2-Hydroxypropyl methacrylate (27813-02-1)	
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)
1,1,1-Trimethylolpropane trimethacrylate (3290-92-4)	
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
1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)	
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
boric acid (10043-35-3)	
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
4-tert-butylpyrocatechol (98-29-3)	
LC50 fish 1	0.12 mg/l (96 h, Danio rerio, Lethal, ECHA)
EC50 Daphnia 1	> µg/l

12.2. Persistence and degradability

HFX, A	
Persistence and degradability	Not established.
2-Hydroxypropyl methacrylate (27813-02-1)	
Persistence and degradability	Readily biodegradable in water. No (test) data on mobility of the substance available.
boric acid (10043-35-3)	
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
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

HFX, A

Safety Data Sheet

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ADR	IMDG	IATA	RID
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
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

National/international regulations

No additional information available

SECTION 16: Other information

SDS Major/Minor	None
Date of issue	23/11/2015
Revision date	23/11/2015
Supersedes	18/05/2015

Indication of changes:
Other information None.

Full text of H-statements:

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

HF_X, A

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

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