HIT-MM PLUS

Safety information for 2-Component-products

Issue date: 03/04/2020 Revision date: 03/04/2020 Supersedes: 29/01/2019 Version: 8.0

SECTION 1: Kit identification

1.1 Product identifier

Product name	HIT-MM PLUS
	
Product code	BU Anchor

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

Hilti Qatar W.L.L.
Souq Al Rawda
Salwa Road
P.O. Box 24097
Doha Ad Dawḥah - Qatar
T +974 4406 3600 - F +974 4406 3669
QA.info@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)

Eye Irrit. 2A	H319
Skin Sens. 1	H317
Carc. 1B	H350
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

Label elements

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

Hazard pictograms (GHS UN)

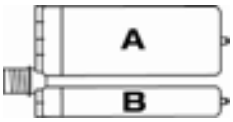
GHS07 GHS08 GHS09

Signal word (GHS UN)	Danger
Hazardous ingredients	methacrylates, dibenzoyl peroxide, 1,2-dihydroxybenzene
Hazard statements (GHS UN)	H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H350 - May cause cancer. H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (GHS UN)	P280 - Wear protective gloves, protective clothing, eye protection. 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. P302+P352 - IF ON SKIN: Wash with plenty of water. P337+P313 - If eye irritation persists: Get medical advice/attention. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

Additional information

2-Component-foilpack, contains:
Component A: Urethane methacrylate resin, inorganic filler
Component B: Dibenzoyl peroxide, phlegmatized



Name	General description	Quantity	Unit	Classification according to the United Nations GHS
HIT-MM PLUS, A		1	pcs	Eye Irrit. 2A, H319 Skin Sens. 1, H317 Carc. 1B, H350
HIT-MM PLUS, B		1	pcs	Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

SECTION 4: General advice

General advice	For professional users only

SECTION 5: Safe handling advice

General measures	Spilled material may present a slipping hazard
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 Mechanically recover the product 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 persists
First-aid measures after ingestion	Rinse mouth Get medical advice/attention. Do not induce vomiting Obtain emergency medical attention

First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air Allow the victim to rest
First-aid measures after skin contact	Wash contaminated clothing before reuse. Wash with plenty of water/… If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures general	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)
Symptoms/effects after eye contact	May cause severe irritation
Symptoms/effects 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 the environment
Protection during firefighting	Self-contained breathing apparatus 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

HIT-MM PLUS, B

Safety Data Sheet

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

Issue date: 03/04/2020 Revision date: 03/04/2020 Supersedes: 28/01/2019

Version: 7.5

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

1.1. Product identifier

Product form	Mixture
Product name	HIT-MM PLUS, B
Product code	BU Anchor

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

Use of the substance/mixture	Composite mortar component for fasteners in the construction industry For professional use only

1.3. Details of the supplier of the safety data sheet

Supplier
Hilti Qatar W.L.L.
Souq Al Rawda
Salwa Road
P.O. Box 24097
Doha Ad Dawḩah - Qatar
T +974 4406 3600 - F +974 4406 3669
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Hilti Entwicklungsgesellschaft mbH
Hiltistraße 6
86916 Kaufering - Deutschland
T +49 8191 906876
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1.4. Emergency telephone number

Emergency number	Schweizerisches Toxikologisches Informationszentrum – 24h Service +41 44 251 51 51 (international) +974 4406 3600

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin Sens. 1	H317
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

Full text of 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. H410 - Very toxic to aquatic life with long lasting effects.
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, medical attention.

P337+P313 - If eye irritation persists: Get medical advice, medical 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

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
dibenzoyl peroxide	(CAS-No.) 94-36-0	5 - <10	Organic Peroxides, Type B, H241 Serious eye damage/eye irritation, Category 2A, H319 Skin sensitisation, Category 1, H317 Hazardous to the aquatic environment — Acute Hazard, Category 1, H400 (M=10) Hazardous to the aquatic environment — Chronic Hazard, Category 1, H410 (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	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 person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	Wash contaminated clothing before reuse. Wash with plenty of 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 persists.
First-aid measures after ingestion	Rinse mouth. Get medical advice/attention. Do not induce vomiting. Obtain emergency medical attention.

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

Symptoms/effects after skin contact	May cause an allergic skin reaction.
Symptoms/effects after eye contact	May cause severe irritation.
Potential adverse human health effects and symptoms	No additional information available.

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 the 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

General measures	Spilled material may present a slipping hazard.

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. Mechanically recover 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
Heat and ignition sources	Keep away from heat and direct sunlight.

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. Appropriate engineering controls

Appropriate engineering controls	Ensure good ventilation of the work station.
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.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection: Wear protective gloves. The permeation time is not the maximum wearing time! Generally speaking, it must be reduced. Contact with either mixtures of substances or different substances may shorten the protective function's effective duration.

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,12		EN 374

Eye protection: Wear security glasses which protect from splashes

Type	Use	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166, EN 170

Skin and body protection: Wear suitable protective clothing

8.4. Exposure limit values for the other components

No additional information available

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	≈ 6
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/cm³ DIN 51757
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

SADT	65 °C

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
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified

Skin corrosion/irritation	Not classified pH: ≈ 6
Serious eye damage/irritation	Not classified pH: ≈ 6
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified

HIT-MM PLUS, B	
Viscosity, kinematic	52941.176 mm²/s

Potential adverse human health effects and symptoms	No additional information available.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	Very toxic to aquatic life.
Classification procedure (Hazardous to the aquatic environment, short-term (acute))	Calculation method
Hazardous to the aquatic environment, long-term (chronic)	Very toxic to aquatic life with long lasting effects.
Classification procedure (Hazardous to the aquatic environment, long-term (chronic))	Calculation method

dibenzoyl peroxide (94-36-0)	
EC50 Daphnia 1	0.11 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
LC50 fish 2	0.0602 mg/l (96h; Oncorhynchus mykiss; ECHA)
ErC50 (algae)	0.0711 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
NOEC (acute)	0.0316 mg/l (96h; Oncorhynchus mykiss; ECHA)
NOEC chronic fish	< 0.001

12.2. Persistence and degradability

HIT-MM PLUS, B	
Persistence and degradability	Not established.

dibenzoyl peroxide (94-36-0)	
Persistence and degradability	Readily biodegradable in water. Not established. May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

HIT-MM PLUS, B	
Bioaccumulative potential	Not established.

dibenzoyl peroxide (94-36-0)	
Log Pow	3.71
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).

12.4. Mobility in soil

dibenzoyl peroxide (94-36-0)	
Surface tension	No data available (test not performed)
Log Pow	See section 12.1 on ecotoxicology

Log Koc	See section 12.1 on ecotoxicology
Ecology - soil	Low potential for mobility in soil.

12.5. Other adverse effects

Ozone	Not classified
Other adverse effects	No additional information available
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.
Product/Packaging disposal recommendations	After curing, the product can be disposed of with household waste. . Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. Packaging contaminated by the product : Dispose in a safe manner in accordance with local/national regulations.
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	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name			
Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group			
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards			
Not regulated	Not regulated	Not regulated	Not regulated
Environmentally hazardous substances derogation applies (quantity of liquids ≤ 5 litres or net mass of solids ≤ 5 kg)			
not restricted according ADR Special Provision SP375, IATA-DGR Special Provision A197 and IMDG-Code 2.10.2.7			

14.6. Special precautions for user

- Overland transport

Special provisions (ADR) 375

- Transport by sea

No data available

- Air transport

Special provisions (IATA) A197

- Rail transport

Carriage prohibited (RID) No

14.7. Transport in bulk according to Annex II of MARPOL 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

SDS Major/Minor	None
Issue date	03/04/2020
Revision date	03/04/2020
Supersedes	28/01/2019

Abbreviations and acronyms

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE - Acute Toxicity Estimate

BCF - Bioconcentration factor

CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

DMEL - Derived Minimal Effect level

DNEL - Derived-No Effect Level

EC50 - Median effective concentration

IARC - International Agency for Research on Cancer

IATA - International Air Transport Association

IMDG - International Maritime Dangerous Goods

LC50 - Median lethal concentration

LD50 - Median lethal dose

LOAEL - Lowest Observed Adverse Effect Level

NOAEC - No-Observed Adverse Effect Concentration

NOAEL - No-Observed Adverse Effect Level

NOEC - No-Observed Effect Concentration

OECD - Organisation for Economic Co-operation and Development

PNEC - Predicted No-Effect Concentration

PBT - Persistent Bioaccumulative Toxic

REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006

RID - Regulations concerning the International Carriage of Dangerous Goods by Rail

SDS - Safety Data Sheet

vPvB - Very Persistent and Very Bioaccumulative

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.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

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.

HIT-MM PLUS, A

Safety Data Sheet

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

Issue date: 03/04/2020 Revision date: 03/04/2020 Supersedes: 25/01/2019

Version: 8.0

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

1.1. Product identifier

Product form	Mixture
Product name	HIT-MM PLUS, A
Product code	BU Anchor

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

Use of the substance/mixture	Composite mortar component for fasteners in the construction industry For professional use only

1.3. Details of the supplier of the safety data sheet

Supplier
Hilti Qatar W.L.L.
Souq Al Rawda
Salwa Road
P.O. Box 24097
Doha Ad Dawḩah - Qatar
T +974 4406 3600 - F +974 4406 3669
QA.info@hilti.com

Department issuing data specification sheet
Hilti Entwicklungsgesellschaft mbH
Hiltistraße 6
86916 Kaufering - Deutschland
T +49 8191 906876
anchor.hse@hilti.com

1.4. Emergency telephone number

Emergency number	Schweizerisches Toxikologisches Informationszentrum – 24h Service +41 44 251 51 51 (international) +974 4406 3600

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Eye Irrit. 2A	H319
Skin Sens. 1	H317
Carc. 1B	H350

Full text of 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-Propenoic acid, 2-methyl-, 1,4-butanediyl ester; 1,2-dihydroxybenzene; 2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol
Hazard statements (GHS UN)	H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H350 - May cause cancer.
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, medical attention.
P337+P313 - If eye irritation persists: Get medical advice, medical 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

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol	(CAS-No.) 27813-02-1	10 - 25	Flammable liquids Not classified Acute toxicity (oral) Not classified Serious eye damage/eye irritation, Category 2A, H319 Skin sensitisation, Category 1, H317 Hazardous to the aquatic environment - Acute Hazard Not classified
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester	(CAS-No.) 2082-81-7	2,5 - 5	Skin sensitisation, category 1B, H317 Hazardous to the aquatic environment — Acute Hazard, Category 3, H402 Hazardous to the aquatic environment — Chronic Hazard, Category 3, H412
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 Hazardous to the aquatic environment — Acute Hazard, Category 3, H402 Hazardous to the aquatic environment — Chronic Hazard, Category 3, H412
1,2-dihydroxybenzene	(CAS-No.) 120-80-9	0,1 - <1	Acute toxicity (oral), Category 3, H301 Acute toxicity (dermal), Category 3, H311 Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 2A, H319 Germ cell mutagenicity, Category 2, H341 Carcinogenicity, Category 1B, H350 Hazardous to the aquatic environment — Acute Hazard, Category 2, H401

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general: 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 person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact: Wash contaminated clothing before reuse. Wash with plenty of 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 persists.

First-aid measures after ingestion	Rinse mouth. Get medical advice/attention. Do not induce vomiting. Obtain emergency medical attention.

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

Symptoms/effects after skin contact	May cause an allergic skin reaction.
Symptoms/effects after eye contact	May cause severe irritation.
Potential adverse human health effects and symptoms	No additional information available.

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 the 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

General measures	Spilled material may present a slipping hazard.

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. Mechanically recover 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
Heat and ignition sources	Keep away from heat and direct sunlight.

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. Appropriate engineering controls

Appropriate engineering controls	Ensure good ventilation of the work station.
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.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection: Wear protective gloves. The permeation time is not the maximum wearing time! Generally speaking, it must be reduced. Contact with either mixtures of substances or different substances may shorten the protective function's effective duration.

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,12		EN 374

Eye protection: Wear security glasses which protect from splashes

Type	Use	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166, EN 170

Skin and body protection	Wear suitable protective clothing

8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid
Appearance	Thixotropic paste.
Colour	Light grey.
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	> 109 °C DIN EN ISO 1523
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	1.65 g/ml AW 4.3.23
Solubility	Water: Not miscible
Log Pow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	100 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
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (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)

2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	
LD50 oral rat	10066 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

1,2-dihydroxybenzene (120-80-9)	
LD50 oral rat	300 mg/kg
LD50 dermal rat	600 mg/kg
LC50 inhalation rat (Vapours - mg/l/4h)	>= 2.8 mg/l/4h

Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
Carcinogenicity	May cause cancer.
Reproductive toxicity	Not classified
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified

HIT-MM PLUS, A	
Viscosity, kinematic	60606.061 mm²/s

Potential adverse human health effects and symptoms	No additional information available.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	Not classified
Hazardous to the aquatic environment, long-term (chronic)	Not classified

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (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)
ErC50 (algae)	> 97.2 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, 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)

2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	
LC50 other aquatic organisms 1	9.79 mg/l
NOEC (acute)	7.51 mg/l
NOEC (chronic)	20 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

1,2-dihydroxybenzene (120-80-9)	
LC50 fish 1	9.22 mg/l
LC50 other aquatic organisms 1	22 mg/l

12.2. Persistence and degradability

HIT-MM PLUS, A	
Persistence and degradability	Not established.

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
Persistence and degradability	Readily biodegradable in water.

2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	
Biodegradation	84 %

12.3. Bioaccumulative potential

HIT-MM PLUS, A	
Bioaccumulative potential	Not established.

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
BCF fish 1	<= 100
BCF fish 2	3.2 Quantitative structure-activity relationship (QSAR)
Log Pow	0.97 (OECD 102 method)
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500).

2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	
Log Pow	3.1

1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)	
BCF fish 1	≈
Log Kow	2.1

12.4. Mobility in soil

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
Log Pow	See section 12.1 on ecotoxicology
Log Koc	See section 12.1 on ecotoxicology
Ecology - soil	Highly mobile in soil.

2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	
Log Pow	See section 12.1 on ecotoxicology

1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)	
Log Kow	See section 12.1 on ecotoxicology

12.5. Other adverse effects

Ozone	Not classified
Other adverse effects	No additional information available
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.
Product/Packaging disposal recommendations	After curing, the product can be disposed of with household waste. . Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. Packaging contaminated by the product : Dispose in a safe manner in accordance with local/national regulations.
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	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name			
Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group			
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards			
Not regulated	Not regulated	Not regulated	Not regulated
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 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

SDS Major/Minor	None
Issue date	03/04/2020
Revision date	03/04/2020
Supersedes	25/01/2019

Abbreviations and acronyms

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE - Acute Toxicity Estimate

BCF - Bioconcentration factor

CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

DMEL - Derived Minimal Effect level

DNEL - Derived-No Effect Level

EC50 - Median effective concentration

IARC - International Agency for Research on Cancer

IATA - International Air Transport Association

IMDG - International Maritime Dangerous Goods

LC50 - Median lethal concentration

LOAEL - Lowest Observed Adverse Effect Level

NOAEC - No-Observed Adverse Effect Concentration

LD50 - Median lethal dose

NOAEL - No-Observed Adverse Effect Level

NOEC - No-Observed Effect Concentration

OECD - Organisation for Economic Co-operation and Development

PBT - Persistent Bioaccumulative Toxic

PNEC - Predicted No-Effect Concentration

REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006

RID - Regulations concerning the International Carriage of Dangerous Goods by Rail

SDS - Safety Data Sheet

vPvB - Very Persistent and Very Bioaccumulative

Other information: None.

Full text of H-statements:

H300	Fatal if swallowed.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects.

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.