

HIT-RE 500 V3

Safety information for 2-Component-products

Issue date: 29/09/2022

Revision date: 29/09/2022

Supersedes: 13/05/2020

Version: 2.4

SECTION 1: Kit identification

1.1 Product identifier

Product name

HIT-RE 500 V3



Product code

BU Anchor

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

Hilti (South Africa) (Pty) Ltd.

2 Tugela Lane, Waterfall Logistics Precinct
Corner Bridal Veil Road and R101

2090 Midrand - South Africa

T +2711 237300 - F +2711 2373111

Customercare.za@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

Acute Tox. 5 (Oral)	H303
Skin Corr. 1B	H314
Skin Sens. 1	H317
Muta. 2	H341
Repr. 1B	H360
STOT SE 3	H335
Aquatic Chronic 2	H411

Label elements

Labelling according to the United Nations GHS

Hazard pictograms (GHS UN)



GHS05

GHS07

GHS08

GHS09

Signal word (GHS UN)

Danger

Hazardous ingredients

Epoxy resin, Amines

Hazard statements (GHS UN)

H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H335 - May cause respiratory irritation.
H341 - Suspected of causing genetic defects.

HIT-RE 500 V3

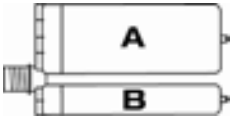
Safety information for 2-Component-products

Precautionary statements (GHS UN)

H360 - May damage fertility or the unborn child.
H411 - Toxic to aquatic life with long lasting effects.
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.
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: Epoxy resin, Reactive diluent, inorganic filler
Component B: Amine hardener, inorganic filler



Name	General description	Quantity	Unit	Classification according to the United Nations GHS
HIT-RE 500 V3, B		1	pcs (pieces)	Acute Tox. 5 (Oral), H303 Skin Corr. 1B, H314 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Acute 2, H401 Aquatic Chronic 3, H412
HIT-RE 500 V3, A (GHS08)		1	pcs (pieces)	Skin Corr. 1C, H314 Skin Sens. 1, H317 Muta. 2, H341 Repr. 1B, H360 Aquatic Acute 2, H401 Aquatic Chronic 2, H411

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 Avoid release to the environment Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. After curing, the product can be disposed of with household waste.
Storage conditions	Protect from sunlight. Store in a well-ventilated place.
Technical measures	Comply with applicable regulations
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 Avoid contact during pregnancy/while nursing
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 On land, sweep or shovel into suitable containers Store away from other materials.
For containment	Collect spillage.
Incompatible materials	Sources of ignition Direct sunlight

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Incompatible products

Strong bases
Strong acids

SECTION 6: First aid measures

First-aid measures after eye contact	Get immediate medical advice/attention. Immediately rinse with water for a prolonged period while holding the eyelids wide open Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist
First-aid measures after ingestion	Do not induce vomiting Rinse mouth Immediately call a POISON CENTER/doctor.
First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	Wash with plenty of water/... Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get immediate medical advice/attention.
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/effects	Causes severe skin burns and eye damage.
Symptoms/effects after eye contact	Causes serious eye damage.
Symptoms/effects after skin contact	May cause an allergic skin reaction.
Other medical advice or treatment	Treat symptomatically

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

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Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

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Supersedes: 13/05/2020

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SECTION 1: Identification

1.1. GHS Product identifier

Product form	Mixture
Product name	HIT-RE 500 V3
UN-No. (ADR)	1759
Product code	BU Anchor

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

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

1.4. Supplier's details

Supplier

Hilti (South Africa) (Pty) Ltd.
2 Tugela Lane, Waterfall Logistics Precinct Corner Bridal Veil Road and R101
ZA– 2090 Midrand
South Africa
T +2711 237300 - F +2711 2373111
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Department issuing data specification sheet

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Hiltistraße 6
DE– 86916 Kaufering
Deutschland
T +49 8191 906876
anchor.hse@hilti.com

1.5. Emergency phone number

Emergency number	Schweizerisches Toxikologisches Informationszentrum – 24h Service +41 44 251 51 51 (international) +2711 237300
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SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Skin corrosion/irritation, Category 1C	H314	Calculation method
Skin sensitisation, Category 1	H317	Calculation method
Germ cell mutagenicity, Category 2	H341	Expert judgment
Reproductive toxicity, Category 1B	H360	Expert judgment
Hazardous to the aquatic environment – Acute Hazard, Category 2	H401	Calculation method
Hazardous to the aquatic environment – Chronic Hazard, Category 2	H411	Calculation method
Full text of H-statements: see section 16		

2.2. GHS Label elements, including precautionary statements

Labelling according to the United Nations GHS

Hazard pictograms (GHS UN)



Signal word (GHS UN)

Danger

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Hazardous ingredients	2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane, Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol, butanedioldiglycidyl ether, 1,3 Propanediol, 2 ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane
Hazard statements (GHS UN)	H314 - Causes severe skin burns and eye damage H317 - May cause an allergic skin reaction H341 - Suspected of causing genetic defects H360 - May damage fertility or the unborn child H411 - 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. 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 which do not result in classification

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
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	CAS-No.: 1675-54-3	25 – 40	Flammable liquids Not classified Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 2A, H319 Skin sensitisation, Category 1, H317 Hazardous to the aquatic environment – Acute Hazard, Category 2, H401 Hazardous to the aquatic environment – Chronic Hazard, Category 2, H411
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	CAS-No.: 9003-36-5	10 – 25	Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 2A, H319 Skin sensitisation, Category 1, H317 Hazardous to the aquatic environment – Chronic Hazard, Category 2, H411

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Name	Product identifier	%	Classification according to the United Nations GHS
butanedioldiglycidyl ether	CAS-No.: 2425-79-8	5 – 10	Flammable liquids Not classified Acute toxicity (oral), Category 4, H302 Acute toxicity (dermal), Category 4, H312 Acute toxicity (inhal.), Category 4, H332 Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 1, H318 Skin sensitisation, Category 1, H317 Hazardous to the aquatic environment – Acute Hazard, Category 3, H402 Hazardous to the aquatic environment – Chronic Hazard, Category 3, H412
1,3 Propanediol, 2 ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane	CAS-No.: 30499-70-8	5 – 10	Skin corrosion/irritation, Category 1C, H314 Serious eye damage/eye irritation, Category 1, H318 Skin sensitisation, category 1B, H317 Germ cell mutagenicity, Category 2, H341 Reproductive toxicity, Category 1B, H360 Hazardous to the aquatic environment – Chronic Hazard, Category 2, H411
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	CAS-No.: 2530-83-8	2,5 – 5	Acute toxicity (dermal), Category 5, H313 Serious eye damage/eye irritation, Category 1, H318 Hazardous to the aquatic environment – Acute Hazard, Category 3, H402

Full text of H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of necessary first-aid measures

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).
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	Gently wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get immediate 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.

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First-aid measures after ingestion	Rinse mouth. Get medical advice/attention. Do not induce vomiting. Obtain emergency medical attention.
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4.2. Most important symptoms/effects, acute and delayed

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

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable 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. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire	Thermal decomposition generates : Carbon dioxide. Carbon monoxide.
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5.3. Special protective actions for fire-fighters

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.
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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. Avoid release to the environment. Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. After curing, the product can be disposed of with household waste.

6.3. Methods and materials 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. On land, sweep or shovel into suitable containers. 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.
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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 Protect from sunlight.
 Incompatible products Strong bases. Strong acids.
 Incompatible materials Sources of ignition. Direct sunlight.
 Heat and ignition sources Keep away from heat and direct sunlight.
 Storage temperature 5 – 25 °C

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls No specific measures identified.
 Environmental exposure controls No specific measures are required provided the product is handled in accordance with the general rules of occupational hygiene and safety.
 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)

Materials for protective clothing Long sleeved protective clothing
 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)	> 0,4		EN ISO 374

Eye protection Wear security glasses which protect from splashes

Type	Field of application	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166, EN 170

Personal protective equipment symbol(s)



8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state Solid
 Appearance Thixotropic paste
 Colour Light grey.
 Odour characteristic.
 Odour threshold Not available
 Melting point Not available
 Freezing point Not available
 Boiling point Not available

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according to the United Nations GHS (Rev. 9, 2021)

Flammability	Non flammable.
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Flash point	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not available
pH	6,6
pH solution	Not available
Viscosity, kinematic (calculated value) (40 °C)	Not applicable
Partition coefficient n-octanol/water (Log Kow)	Not available
Vapour pressure	Not available
Vapour pressure at 50 °C	Not available
Density	1,45 g/cm ³
Relative density	Not available
Relative vapour density at 20 °C	Not applicable
Solubility	insoluble in water.
Viscosity, dynamic	45 – 59 Pa·s 23 °C
Particle size	Not available

9.2. Data relevant with regard to physical hazard classes (supplemental)

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

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates : fume. Carbon monoxide. Carbon dioxide.

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

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)	
LD50 oral rat	> 2000 mg/kg (Rat; OECD 420: Acute Oral toxicity – Acute Toxic Class Method; Experimental value)
LD50 dermal rat	> 2000 mg/kg (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	
LD50 oral rat	> 5000 mg/kg bodyweight (Rat; ECHA)

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Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	
LD50 dermal rat	> 2000 mg/kg bodyweight (Rat; ECHA)
butanedioldiglycidyl ether (2425-79-8)	
LD50 oral rat	2980 mg/kg (Rat)
LD50 oral	1163 mg/kg (Rat; Exp. Key study ECHA)
LD50 dermal rabbit	1130 mg/kg (Rabbit)
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)	
LD50 oral rat	8025 mg/kg bodyweight (Rat; Equivalent or similar to OECD 401; Experimental value)
LD50 dermal rabbit	4250 mg/kg bodyweight (Rabbit; Experimental value; Equivalent or similar to OECD 402)
Skin corrosion/irritation	Causes severe skin burns. pH: 6,6
Serious eye damage/irritation	Assumed to cause serious eye damage pH: 6,6
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	Suspected of causing genetic defects.
Carcinogenicity	Not classified
Reproductive toxicity	May damage fertility or the unborn child.
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified
Potential adverse human health effects and symptoms	No additional information available.

SECTION 12: Ecological information

12.1. Toxicity

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

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)	
LC50 - Fish [1]	1,2 mg/l (96 h; Oncorhynchus mykiss; Lethal)
LC50 - Fish [2]	2,3 mg/l (96 h; Oncorhynchus mykiss; Nominal concentration)
EC50 - Crustacea [1]	2 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 72h - Algae [1]	9,4 mg/l (EPA 660/3 - 75/009, Selenastrum capricornutum, Static system, Fresh water, Experimental value, Biomass)
Threshold limit - Algae [1]	> 11 mg/l (72 h; Scenedesmus sp.)
Threshold limit - Algae [2]	4,2 mg/l (72 h; Scenedesmus sp.)
butanedioldiglycidyl ether (2425-79-8)	
LC50 - Fish [1]	24 mg/l (96 h; Pisces) ECHA
LC50 - Other aquatic organisms [1]	> 160 mg/l

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butanedioldiglycidyl ether (2425-79-8)	
NOEC (acute)	40 mg/l
Threshold limit - Algae [1]	88930 mg/l (96 h; Algae)
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)	
LC50 - Fish [1]	55 mg/l (96 h; Cyprinus carpio; Young)
LC50 - Fish [2]	237 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 - Crustacea [1]	473 – 710 mg/l (48 h; Daphnia magna)
Threshold limit - Algae [1]	119 mg/l (7 days; Anabaena flosaquae)
Threshold limit - Algae [2]	250 mg/l (72 h; Selenastrum capricornutum)
12.2. Persistence and degradability	
HIT-RE 500 V3, A	
Persistence and degradability	May cause long-term adverse effects in the environment.
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)	
Not rapidly degradable	
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	
Not rapidly degradable	
butanedioldiglycidyl ether (2425-79-8)	
Biochemical oxygen demand (BOD)	0,01982 g O ₂ /g substance
1,3 Propanediol, 2 ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane (30499-70-8)	
Not rapidly degradable	
12.3. Bioaccumulative potential	
HIT-RE 500 V3, A	
Bioaccumulative potential	Not established.
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)	
Partition coefficient n-octanol/water (Log Kow)	≥ 2,918 (Experimental value; EU Method A.8: Partition Coefficient; 25 °C)
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500).
butanedioldiglycidyl ether (2425-79-8)	
Partition coefficient n-octanol/water (Log Kow)	-0,15
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)	
Partition coefficient n-octanol/water (Log Kow)	-0,92 (Estimated value)
12.4. Mobility in soil	
HIT-RE 500 V3, A	
Mobility in soil	No additional information available
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)	
Surface tension	59 mN/m (20 °C, 0.09 g/l)
Ecology - soil	No (test)data on mobility of the substance available.
12.5. Other adverse effects	
Ozone	Not classified

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Other adverse effects	No additional information available
Other information	Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal 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 / IMDG / IATA / RID

ADR	IMDG	IATA	RID
14.1. UN number or ID number			
UN 1759	UN 1759	UN 1759	UN 1759
14.2. UN proper shipping name			
CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidylether)	CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidylether)	Corrosive solid, n.o.s. (trimethylolpropane triglycidylether)	CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidylether)
Transport document description			
UN 1759 CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidylether), 8, III, (E), ENVIRONMENTALLY HAZARDOUS	UN 1759 CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidylether), 8, III, MARINE POLLUTANT/ENVIRONMENTALL Y HAZARDOUS	UN 1759 Corrosive solid, n.o.s. (trimethylolpropane triglycidylether), 8, III, ENVIRONMENTALLY HAZARDOUS	UN 1759 CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidylether), 8, III, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)			
8	8	8	8
14.4. Packing group			
III	III	III	III
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
No supplementary information available			

14.6. Special precautions for user

Overland transport	
Classification code (ADR)	C10
Special provisions (ADR)	274
Limited quantities (ADR)	5kg
Packing instructions (ADR)	P002, IBC08, LP02, R001



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Mixed packing provisions (ADR) MP10
Transport category (ADR) 3
Orange plates



Tunnel restriction code (ADR) E

Transport by sea

Special provisions (IMDG) 223, 274
Packing instructions (IMDG) P002, LP02
EmS-No. (Fire) F-A
EmS-No. (Spillage) S-B
Stowage category (IMDG) A

Air transport

PCA packing instructions (IATA) 860
PCA max net quantity (IATA) 25kg
CAO packing instructions (IATA) 864
Special provisions (IATA) A3, A803

Rail transport

Special provisions (RID) 274
Packing instructions (RID) P002, IBC08, LP02, R001

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

No additional information available

SECTION 16: Other information

SDS Major/Minor None
Issue date 29/09/2022
Revision date 29/09/2022
Supersedes 13/05/2020

Section	Changed item	Change	Comments
	Legislation	Modified	

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
IATA - International Air Transport Association
EC50 - Median effective concentration



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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
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
None.

Other information

Full text of H-statements:	
H302	Harmful if swallowed
H312	Harmful in contact with skin
H313	May be harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H341	Suspected of causing genetic defects
H360	May damage fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H411	Toxic to aquatic life with long lasting effects
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.

HIT-RE 500 V3, B

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

Issue date: 29/09/2022 Revision date: 29/09/2022

Supersedes: 13/05/2020

Version: 1.7

SECTION 1: Identification

1.1. GHS Product identifier

Product form	Mixture
Product name	HIT-RE 500 V3
UN-No. (ADR)	3259
Product code	BU Anchor

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

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

1.4. Supplier's details

Supplier

Hilti (South Africa) (Pty) Ltd.
2 Tugela Lane, Waterfall Logistics Precinct Corner Bridal Veil Road and R101
ZA– 2090 Midrand
South Africa
T +2711 237300 - F +2711 2373111
Customercare.za@hilti.com

Department issuing data specification sheet

Hilti Entwicklungsgesellschaft mbH
Hiltistraße 6
DE– 86916 Kaufering
Deutschland
T +49 8191 906876
anchor.hse@hilti.com

1.5. Emergency phone number

Emergency number	Schweizerisches Toxikologisches Informationszentrum – 24h Service +41 44 251 51 51 (international) +2711 237300
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SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Acute toxicity (oral), Category 5	H303	Calculation method
Skin corrosion/irritation, Category 1B	H314	Expert judgment
Skin sensitisation, Category 1	H317	Calculation method
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335	Calculation method
Hazardous to the aquatic environment – Acute Hazard, Category 2	H401	Calculation method
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412	Calculation method
Full text of H-statements: see section 16		

2.2. GHS Label elements, including precautionary statements

Labelling according to the United Nations GHS

Hazard pictograms (GHS UN)



Signal word (GHS UN)

Danger

Hazardous ingredients

2-methyl-1,5-pentanediamine, Phenol, styrenated, m-Xylylenediamine, 2,4,6-tris(dimethylaminomethyl)phenol, 3-Aminopropyltriethoxysilan

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Hazard statements (GHS UN)	<p>H314 - Causes severe skin burns and eye damage</p> <p>H317 - May cause an allergic skin reaction</p> <p>H335 - May cause respiratory irritation</p> <p>H412 - Harmful to aquatic life with long lasting effects</p>
Precautionary statements (GHS UN)	<p>P262 - Do not get in eyes, on skin, or on clothing.</p> <p>P280 - Wear eye protection, protective clothing, protective gloves.</p> <p>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P333+P313 - If skin irritation or rash occurs: Get medical advice, medical attention.</p> <p>P337+P313 - If eye irritation persists: Get medical advice, medical attention.</p> <p>P302+P352 - IF ON SKIN: Wash with plenty of water.</p>

2.3. Other hazards which do not result in classification

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-methyl-1,5-pentanediamine	CAS-No.: 15520-10-2	25 – 35	<p>Flammable liquids, Category 4, H227</p> <p>Acute toxicity (oral), Category 4, H302</p> <p>Acute toxicity (dermal), Category 4, H312</p> <p>Acute toxicity (inhalation:dust,mist) Category 4, H332</p> <p>Skin corrosion/irritation, Category 1A, H314</p> <p>Serious eye damage/eye irritation, Category 1, H318</p> <p>Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation, H335</p>
Phenol, styrenated	CAS-No.: 61788-44-1	5 – 10	<p>Flammable liquids Not classified</p> <p>Acute toxicity (inhalation:dust,mist) Not classified</p> <p>Skin corrosion/irritation, Category 2, H315</p> <p>Skin sensitisation, Category 1, H317</p> <p>Hazardous to the aquatic environment – Acute Hazard, Category 1, H400</p> <p>Hazardous to the aquatic environment – Chronic Hazard, Category 2, H411</p>

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Name	Product identifier	%	Classification according to the United Nations GHS
m-Xylylenediamine	CAS-No.: 1477-55-0	5 – <8	Acute toxicity (oral), Category 4, H302 Acute toxicity (inhalation:dust,mist) Category 4, H332 Skin corrosion/irritation, Category 1B, H314 Serious eye damage/eye irritation, Category 1, H318 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
2,4,6-tris(dimethylaminomethyl)phenol	CAS-No.: 90-72-2	1 – 2,5	Flammable liquids Not classified Acute toxicity (oral), Category 4, H302 Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 2A, H319 Hazardous to the aquatic environment – Acute Hazard, Category 3, H402
3-Aminopropyltriethoxysilan	CAS-No.: 919-30-2	1 – 2,5	Flammable liquids, Category 4, H227 Acute toxicity (oral), Category 4, H302 Acute toxicity (dermal), Category 5, H313 Skin corrosion/irritation, Category 1B, H314 Skin sensitisation, Category 1, H317 Hazardous to the aquatic environment – Acute Hazard Not classified

Full text of H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of necessary first-aid measures

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).

First-aid measures after inhalation

Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact

Wash with plenty of water/.... Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get immediate medical advice/attention.

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First-aid measures after eye contact	Get immediate medical advice/attention. Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist.
First-aid measures after ingestion	Do not induce vomiting. Rinse mouth. Immediately call a POISON CENTER/doctor.

4.2. Most important symptoms/effects, acute and delayed

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

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

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

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire	Thermal decomposition generates : Carbon dioxide. Carbon monoxide.
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5.3. Special protective actions for fire-fighters

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.
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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. Avoid release to the environment. Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. After curing, the product can be disposed of with household waste.

6.3. Methods and materials 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. On land, sweep or shovel into suitable containers. Store away from other materials.
Other information	Dispose of materials or solid residues at an authorized site.

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Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

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. Avoid contact during pregnancy/while nursing.

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

Technical measures

Comply with applicable regulations.

Storage conditions

Protect from sunlight. Store in a well-ventilated place.

Incompatible products

Strong bases. Strong acids.

Incompatible materials

Sources of ignition. Direct sunlight.

Heat and ignition sources

Keep away from heat and direct sunlight.

Storage temperature

5 – 25 °C

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls

Ensure good ventilation of the work station.

Environmental exposure controls

No specific measures are required provided the product is handled in accordance with the general rules of occupational hygiene and safety.

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)

Materials for protective clothing

Long sleeved protective clothing

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)	> 0,4		EN ISO 374

Eye protection

Wear security glasses which protect from splashes

Type	Field of application	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166, EN 170

Personal protective equipment symbol(s)



8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state

Solid

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according to the United Nations GHS (Rev. 9, 2021)

Appearance	Thixotropic paste
Colour	red.
Odour	Amine-like.
Odour threshold	Not available
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Flammability	Non flammable.
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Flash point	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not available
pH	11,5
pH solution	Not available
Viscosity, kinematic (calculated value) (40 °C)	Not applicable
Partition coefficient n-octanol/water (Log Kow)	Not available
Vapour pressure	Not available
Vapour pressure at 50 °C	Not available
Density	1,31 g/cm ³
Relative density	Not available
Relative vapour density at 20 °C	Not applicable
Solubility	insoluble in water.
Viscosity, dynamic	50 – 70 Pa·s HN-0333
Particle size	Not available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Corrosive vapours.

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

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates : fume. Carbon monoxide. Carbon dioxide. Corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	May be harmful if swallowed.
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified

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HIT-RE 500 V3, B	
ATE UN (oral)	2842,757 mg/kg bodyweight
2-methyl-1,5-pentanediamine (15520-10-2)	
LD50 oral rat	1690 mg/kg (Rat)
LD50 dermal rat	1870 mg/kg
LC50 Inhalation - Rat	4,9 mg/l
Phenol, styrenated (61788-44-1)	
LD50 oral rat	> 2500 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 Inhalation - Rat	158,31 mg/l/4h
m-Xylylenediamine (1477-55-0)	
LD50 oral rat	1090 mg/kg
LD50 dermal rat	> 3100 mg/kg
LD50 dermal	> 3100 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	1,34 mg/l/4h
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
LD50 oral rat	2169 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; 2169 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rat	> 2000 mg/kg (Rat; Literature study; Other; >1 ml/kg; Rat; Experimental value)
3-Aminopropyltriethoxysilan (919-30-2)	
LD50 oral rat	1,57 – 2,83 ml/kg (EPA OTS 798.1175, Rat, Male / female, Experimental value, Oral)
LD50 dermal rabbit	4,29 ml/kg (EPA OTS 798.1100, 24 h, Rabbit, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat [ppm]	> 5 ppm (OECD 403: Acute Inhalation Toxicity, 6 h, Rat, Male, Experimental value, Inhalation (vapours))

Skin corrosion/irritation	Causes severe skin burns. pH: 11,5
Serious eye damage/irritation	Assumed to cause serious eye damage pH: 11,5
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	May cause respiratory irritation.

2-methyl-1,5-pentanediamine (15520-10-2)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified
Potential adverse human health effects and symptoms	No additional information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water	Harmful to aquatic life with long lasting effects.
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according to the United Nations GHS (Rev. 9, 2021)

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

2-methyl-1,5-pentanediamine (15520-10-2)	
LC50 - Fish [1]	130 mg/l (LC50; 48 h)
LOEC (acute)	1800 mg/l
NOEC (acute)	1000 mg/l
Phenol, styrenated (61788-44-1)	
LC50 - Fish [1]	5,6 mg/l
LC50 - Other aquatic organisms [1]	9,7 mg/l
EC50 - Crustacea [1]	1,44 mg/l
EC50 72h - Algae [1]	0,326 mg/l (Algae, Literature study)
NOEC (acute)	3,2 mg/l
Threshold limit - Algae [1]	0,326 mg/l (72 h; Algae)
Threshold limit - Algae [2]	0,14 mg/l (72 h; Algae)
m-Xylylenediamine (1477-55-0)	
LC50 - Fish [1]	75 mg/l
LC50 - Other aquatic organisms [1]	20,3 ppb
EC50 - Crustacea [1]	15 mg/l
LOEC (chronic)	15 mg/l
NOEC (acute)	10,5 mg/kg
NOEC (chronic)	4,7 mg/l
NOEC chronic crustacea	4,7 mg/l
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
LC50 - Fish [1]	> 100 mg/l (96 h; Pisces; Nominal concentration)
LC50 - Fish [2]	70,9 mg/l (96 h; Pisces)
EC50 - Other aquatic organisms [1]	84 mg/l (72 h; Desmodesmus subspicatus; growth rate; ECHA)
ErC50 algae	84 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)
NOEC (chronic)	2 mg/l (28 d; activated sludge, domestic; respiration rate; ECHA)
Threshold limit - Algae [1]	10 - 100,Algae
Threshold limit - Algae [2]	84 mg/l (72 h; Scenedesmus subspicatus; Growth rate)
3-Aminopropyltriethoxysilan (919-30-2)	
LC50 - Fish [1]	> 934 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Brachydanio rerio, Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	331 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
ErC50 algae	> 1000 mg/l (EU Method C.3, 72 h, Scenedesmus subspicatus, Static system, Fresh water, Experimental value, GLP)

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12.2. Persistence and degradability

HIT-RE 500 V3, B	
Persistence and degradability	May cause long-term adverse effects in the environment.
Phenol, styrenated (61788-44-1)	
Biochemical oxygen demand (BOD)	0,000231 g O ₂ /g substance
Chemical oxygen demand (COD)	0,004827 g O ₂ /g substance
m-Xylylenediamine (1477-55-0)	
Not rapidly degradable	
3-Aminopropyltriethoxysilan (919-30-2)	
Persistence and degradability	Not readily biodegradable in water.

12.3. Bioaccumulative potential

HIT-RE 500 V3, B	
Bioaccumulative potential	Not established.
2-methyl-1,5-pentanediamine (15520-10-2)	
Partition coefficient n-octanol/water (Log Kow)	0,27 (Estimated value)
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).
Phenol, styrenated (61788-44-1)	
BCF - Fish [1]	3246 l/kg (BCFBAF v3.01, Pisces, Fresh water, Weight of evidence, Fresh weight)
BCF - Fish [2]	3246 mg/l
Partition coefficient n-octanol/water (Log Kow)	6,24 – 7,77 (Experimental value; OECD 123: Partition Coefficient (1-Octanol/Water): Slow-Stirring Method)
Bioaccumulative potential	Bioaccumulative potential.
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
Partition coefficient n-octanol/water (Log Kow)	0,77 (Literature; 0.219; Experimental value; Equivalent or similar to OECD 107; 21.5 °C)
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).
3-Aminopropyltriethoxysilan (919-30-2)	
BCF - Fish [1]	3,4 (OECD 305: Bioconcentration: Flow-Through Fish Test, 8 week(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Kow)	1,7 (QSAR, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

HIT-RE 500 V3, B	
Mobility in soil	No additional information available
Phenol, styrenated (61788-44-1)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3,145 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)
Ecology - soil	Low potential for mobility in soil.
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1,32 (log Koc, Calculated value)

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2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
Ecology - soil	Highly mobile in soil.
3-Aminopropyltriethoxysilan (919-30-2)	
Ecology - soil	No (test)data on mobility of the substance available.

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. Disposal 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 / IMDG / IATA / RID

ADR	IMDG	IATA	RID
14.1. UN number			
UN 3259	UN 3259	UN 3259	UN 3259
14.2. UN proper shipping name			
AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5-pentanediamine, m-Xylylenediamine)	AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5-pentanediamine, m-Xylylenediamine)	Amines, solid, corrosive, n.o.s. (2-methyl-1,5-pentanediamine, m-Xylylenediamine)	AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5-pentanediamine, m-Xylylenediamine)
Transport document description			
UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5-pentanediamine, m-Xylylenediamine), 8, II, (E)	UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5-pentanediamine, m-Xylylenediamine), 8, II	UN 3259 Amines, solid, corrosive, n.o.s. (2-methyl-1,5-pentanediamine, m-Xylylenediamine), 8, II	UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5-pentanediamine, m-Xylylenediamine), 8, II
14.3. Transport hazard class(es)			
8	8	8	8
			
14.4. Packing group			
II	II	II	II
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

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according to the United Nations GHS (Rev. 9, 2021)

ADR	IMDG	IATA	RID
No supplementary information available			

14.6. Special precautions for user

Overland transport

Classification code (ADR)	C8
Special provisions (ADR)	274
Limited quantities (ADR)	1kg
Packing instructions (ADR)	P002, IBC08
Mixed packing provisions (ADR)	MP10
Transport category (ADR)	2
Orange plates	



Tunnel restriction code (ADR)	E
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Transport by sea

Special provisions (IMDG)	274
Limited quantities (IMDG)	1 kg
Packing instructions (IMDG)	P002
EmS-No. (Fire)	F-A
EmS-No. (Spillage)	S-B
Stowage category (IMDG)	A
MFAG-No	154

Air transport

PCA packing instructions (IATA)	859
PCA max net quantity (IATA)	15kg
CAO packing instructions (IATA)	863
Special provisions (IATA)	A3

Rail transport

Special provisions (RID)	274
Limited quantities (RID)	1kg
Packing instructions (RID)	P002, IBC08

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

No additional information available

SECTION 16: Other information

SDS Major/Minor	None
Issue date	29/09/2022
Revision date	29/09/2022
Supersedes	13/05/2020

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Section	Changed item	Change	Comments
	Legislation	Modified	

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
 IATA - International Air Transport Association
 EC50 - Median effective concentration
 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
 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
 None.

Other information

Full text of H-statements:	
H227	Combustible liquid
H302	Harmful if swallowed
H303	May be harmful if swallowed
H312	Harmful in contact with skin
H313	May be harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H402	Harmful to aquatic life



HIT-RE 500 V3, B

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

Full text of H-statements:	
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.