










Substance Risk Assessment










IMS-7-T02
Rev:01
Date: 29/07/2022

Product Name:	HIT-RE 500 V3	SDS Issue Date:	13/05/2020					
Note – Obtain current SDS (<5yrs from date of issue) before completing this risk assessment								
Manufacture:	Hilti (Aust.) Pty. Ltd.	Telephone	+61 131 292					
Hazardous Substance:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Check for a pictogram in section 2 of the safety data sheet).							
C'pressed Gas	Corrosive	Enviro Hazard	Explosive	Flammable	Harmful Irritant	Health Hazard	Oxidising	Toxic
								
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Uses / application:	Mortar for rebar connections							
Form of substance:	<input type="checkbox"/> Solid <input type="checkbox"/> Liquid <input type="checkbox"/> Gas <input type="checkbox"/> Fine dust <input type="checkbox"/> Coarse dust <input checked="" type="checkbox"/> Paste <input type="checkbox"/> Other specify: N/A							
Can a non / less hazardous product be used for this activity?								
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If 'yes' give reasons for not using: N/A								
How much of the product will the users be exposed to during the task? (e.g., litres, millilitres etc)								
500ml in a single application / tube								
How long will the users be exposed to the product? (e.g., hours per day, days per week, etc):								
2 hours per day								
Isolation:	<input checked="" type="checkbox"/> Containers stored away from the work area when not in use. <input checked="" type="checkbox"/> Containers stored in well ventilated area / suitable containers and away from incompatible materials. <input checked="" type="checkbox"/> Containers kept closed when not in use. <input checked="" type="checkbox"/> No ignition sources / no smoking.							
Ventilation:	<input checked="" type="checkbox"/> Ensure natural ventilation. <input type="checkbox"/> Use of mechanical ventilation. <input type="checkbox"/> Local exhaust ventilation (LEV) extraction devices.							
Other Controls	<input checked="" type="checkbox"/> Training in safe storage and application. <input checked="" type="checkbox"/> Job rotation to reduce exposure. <input checked="" type="checkbox"/> Avoid contact with skin and eyes. <input type="checkbox"/> Use of barrier creams. <input checked="" type="checkbox"/> Good personal hygiene – wash hands before eating, drinking, smoking, toilet.							
First Aid Measures: (Check section 4 of the safety data sheet).								
Wash Eyes	Wash Skin	Induce Vomit	Rinse Mouth Only	Remove to Air				
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Seek medical assistance if condition persists / Immediate medical attention is required for ingestion.								
Fire and remedial: (Check section 5 of the safety data sheet).								
<input checked="" type="checkbox"/> Water <input type="checkbox"/> Carbon Dioxide (CO2) <input checked="" type="checkbox"/> Dry Chemical Powder (ABE/BE) <input type="checkbox"/> Foam <input type="checkbox"/> Wet Chemical <input type="checkbox"/> Fire Blanket <input type="checkbox"/> N/A Comments: Use water spray or fog for cooling exposed containers								
Exposure route of chemical: (Check section 8 of the safety data sheet).								
<input type="checkbox"/> Inhalation <input checked="" type="checkbox"/> Skin (absorption) <input checked="" type="checkbox"/> Eye <input type="checkbox"/> Ingestion <input type="checkbox"/> Injection <input type="checkbox"/> Other – Specify: N/A								



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Is air monitoring required?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Is health monitoring required?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Note: Section 8 Exposure Controls Quartz [Silica – Crystalline] < 1%.			
Health surveillance <u>is</u> required for substances containing one or more of the following ingredients:			
4,4' Methylenebis (MOCA)	Acrylonitrile	Asbestos	Benzene
Cadmium	Creosote	Crystalline silica >1%	Inorganic arsenic
Inorganic chromium	Isocyanates	Organophosphate pesticides	Pentachlorophenol (PCP)
Polycyclic aromatic hydrocarbons	Thallium	Vinyl chloride	
Can this chemical be used in accordance with the controls nominated in the SDS?			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If no, please explain why? (Ensure controls listed manage each of the exposure routes ticked above if required).			
N/A			
Is any Personal Protective Equipment (PPE) required when using the chemical?		Yes	
	<input checked="" type="checkbox"/> Eye Protection		<input type="checkbox"/> Mask / Respirator (Sundstrom SR100 Half Face)
	<input type="checkbox"/> Eye and Face Protection		<input checked="" type="checkbox"/> Gloves
	<input checked="" type="checkbox"/> High Visibility Clothing		<input checked="" type="checkbox"/> Safety Protective Footwear
	<input checked="" type="checkbox"/> Overalls / Clothing		<input type="checkbox"/> Other Specify:
Level of Risk:			
<input checked="" type="checkbox"/> Risk is insignificant and is not likely to increase in future.			
<input type="checkbox"/> Risks are significant but effectively controlled (but could increase in the future).			
<input type="checkbox"/> Risks are significant and not effectively controlled.			
<input type="checkbox"/> Uncertain about the risks.			
Person / s conducting risk assessment: Phil Jenkins, Jay Gaddes			
Assessment approved by:	Phil Jenkins Workplace Health and Safety Manager		
Signature:		Date:	21-09-2023
Next assessment due:	13/05/2025		

HIT-RE 500 V3

Safety information for 2-Component-products

Issue date: 13/05/2020

Revision date: 13/05/2020

Supersedes: 26/02/2019

Version: 2.3

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 (Aust.) Pty. Ltd.
Level 5, 1G Homebush Bay Drive
P.O. Box 3217
2138 Rhodes NSW - Australia
T +61 131 292 - F +61 1300 135 042
serviceaustralia@hilti.com

SECTION 2: General information

Storage

Storage temperature : 5 - 25 °C

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

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

SECTION 3:

Classification of the Product

2.1. Classification of the hazardous chemical

Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Skin corrosion/irritation, Category 1B	H314
Serious eye damage/eye irritation, Category 1	H318
Skin sensitisation, Category 1	H317
Germ cell mutagenicity, Category 2	H341
Reproductive toxicity, Category 1B	H360
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335

2.2. Label elements

Hazard pictograms (GHS AU)



GHS05

GHS07

GHS08

Signal word (GHS AU)

Danger

Hazard statements (GHS AU)

H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.

HIT-RE 500 V3

Safety information for 2-Component-products

Precautionary statements (GHS AU)

H335 - May cause respiratory irritation.
H341 - Suspected of causing genetic defects.
H360 - May damage fertility or the unborn child.
P280 - Wear eye protection, protective clothing, protective gloves.
P262 - Do not get in eyes, on skin, or on clothing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P302+P352 - IF ON SKIN: Wash with plenty of water/...

2.3. Other hazards not contributing to the classification

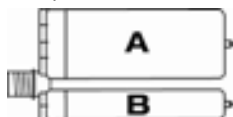
No additional information available

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 model Work Health and Safety Regulations (WHS Regulations)
HIT-RE 500 V3, B		1	pcs (pieces)	Skin Corr. 1B, H314 Skin Sens. 1, H317 STOT SE 3, H335
HIT-RE 500 V3, A		1	pcs (pieces)	Skin Corr. 1C, H314 Skin Sens. 1, H317 Muta. 2, H341 Repr. 1B, H360

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

HIT-RE 500 V3

Safety information for 2-Component-products

Incompatible products	Direct sunlight Strong bases Strong acids
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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 inhalation	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-RE 500 V3, B

Safety Data Sheet

according to the Model Work Health and Safety Regulations

Issue date: 13/05/2020

Revision date: 13/05/2020

Supersedes: 25/02/2019

Version: 1.5

SECTION 1: Identification : Product identifier and chemical identity

1.1. Product identifier

Product form	Mixture
Product name	HIT-RE 500 V3, B
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

Supplier	Department issuing data specification sheet
Hilti (Aust.) Pty. Ltd. Level 5, 1G Homebush Bay Drive P.O. Box 3217 2138 Rhodes NSW - Australia T +61 131 292 - F +61 1300 135 042 serviceaustralia@hilti.com	Hilti Entwicklungsgesellschaft mbH Hiltistraße 6 86916 Kaufering - Deutschland T +49 8191 906876 anchor.hse@hilti.com

1.4. Supplier's details

Hilti (Aust.) Pty. Ltd.
Level 5, 1G Homebush Bay Drive
P.O. Box 3217
2138 Rhodes NSW - Australia
T +61 131 292 - F +61 1300 135 042
serviceaustralia@hilti.com

1.5. Emergency phone number

Emergency number +61 2 8748 1000

SECTION 2: Hazards identification

2.1. Classification of the hazardous chemical

Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Skin corrosion/irritation, Category 1B	H314
Serious eye damage/eye irritation, Category 1	H318
Skin sensitisation, Category 1	H317
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335

2.2. Label elements

Hazard pictograms (GHS AU)



GHS05

GHS07

Signal word (GHS AU)

Danger

Contains

2-methyl-1,5-pentanediamine (25 - 35 %); Phenol, styrenated (5 - 10 %); m-Xylylenediamine (5 - <8 %); 3-Aminopropyltriethoxysilan (1 - 2,5 %); 2,4,6-tris(dimethylaminomethyl)phenol (1 - 2,5 %)

Hazard statements (GHS AU)

H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H335 - May cause respiratory irritation.

HIT-RE 500 V3, B

Safety Data Sheet

according to the Model Work Health and Safety Regulations

Precautionary statements (GHS AU)

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

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

Name	CAS-No.	%	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
2-methyl-1,5-pentanediamine	15520-10-2	25 - 35	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335
Phenol, styrenated	61788-44-1	5 - 10	Skin Irrit. 2, H315 Skin Sens. 1, H317
m-Xylylenediamine	1477-55-0	5 - <8	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 Aquatic Chronic 3, H412
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	1 - 2,5	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
3-Aminopropyltriethoxysilan	919-30-2	1 - 2,5	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Skin Sens. 1, H317

SECTION 4: First aid measures

4.1. Description of 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.
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. Symptoms caused by exposure

Symptoms/effects	Causes severe skin burns and eye damage.
Symptoms/effects after inhalation	May cause an allergic skin reaction.
Symptoms/effects after eye contact	Causes serious eye damage.

HIT-RE 500 V3, B

Safety Data Sheet

according to the Model Work Health and Safety Regulations

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

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire	Thermal decomposition generates : Carbon dioxide. Carbon monoxide.
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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. 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 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. On land, sweep or shovel into suitable containers. Store away from other materials.

SECTION 7: Handling and storage, including how the chemical may be safely used

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.

HIT-RE 500 V3, B

Safety Data Sheet

according to the Model Work Health and Safety Regulations

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.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters - exposure standards

HIT-RE 500 V3, B		
Australia	Local name	Quartz [Silica – Crystalline]
Australia	TWA (mg/m ³)	0.05 mg/m ³ respirable dust
Australia	Remark (AU)	Carcinogenicity Category 1A – Known to have carcinogenic potential for humans. The classification of a chemical into this category is based largely on human evidence from studies that have established a causal relationship between human exposure and the development of cancer.
Australia	Regulatory reference	Workplace exposure standards for airborne contaminants (2019)
m-Xylylenediamine (1477-55-0)		
Australia	Local name	m-Xylene-alpha,alpha'-diamine (m-Xylylendiamine; 1,3-Benzenedimethanamine)
Australia	OEL - Ceilings (mg/m ³)	0.1 mg/m ³
Australia	Remark (AU)	Sk - Absorption through the skin may be a significant source of exposure.

Exposure limit values for the other components

8.2. Monitoring

No additional information available

8.3. Appropriate engineering controls

Appropriate engineering controls	Ensure good ventilation of the work station.
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8.4. Personal protective equipment

Personal protective equipment	Safety glasses. Gloves. Protective clothing. Avoid all unnecessary exposure.
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)	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	> 0,4	EN 374

Eye protection Wear security glasses which protect from splashes

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

HIT-RE 500 V3, B

Safety Data Sheet

according to the Model Work Health and Safety Regulations

Skin and body protection



Wear suitable protective clothing

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.

SECTION 9: Physical and chemical properties

Physical state	Solid
Appearance	Thixotropic paste.
Colour	red
Odour	Amine-like
Odour threshold	No data available
pH	11.5
Relative evaporation rate (butylacetate=1)	No data available
Melting point / Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Auto-ignition temperature	No data available
Flammability (solid, gas)	No data available
Vapour pressure	No data available
Relative density	No data available
Density	1.31 g/cm ³
Solubility	insoluble in water.
Log Pow	No data available
Viscosity	Viscosity, dynamic : 50 - 70 Pa·s HN-0333
Explosive properties	No data available
Explosive limits	No data available
Minimum ignition energy	No data available
Fat solubility	No data available

SECTION 10: Stability and reactivity

Reactivity	Corrosive vapours. Corrosive vapours
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	No additional information available.
Conditions to avoid	Direct sunlight. Extremely high or low temperatures.
Incompatible materials	Strong acids. Strong bases.
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.

HIT-RE 500 V3, B

Safety Data Sheet

according to the Model Work Health and Safety Regulations

SECTION 11: Toxicological information

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

2-methyl-1,5-pentanediamine (15520-10-2)	
LD50 oral rat	1690 mg/kg (Rat)
LD50 dermal rat	1870 mg/kg
LC50 inhalation rat (mg/l)	4.9 mg/l

Phenol, styrenated (61788-44-1)	
LD50 oral rat	> 2500 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (mg/l)	158.31 mg/l/4h

m-Xylylenediamine (1477-55-0)	
LD50 oral rat	1090 mg/kg
LD50 oral	660 mg/kg
LD50 dermal rat	> 3100 mg/kg
LD50 dermal	> 3100 mg/kg
LC50 inhalation rat (Dust/Mist - mg/l/4h)	1.34 mg/l/4h

3-Aminopropyltriethoxysilan (919-30-2)	
LD50 oral rat	1.57 ml/kg

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)

Skin corrosion/irritation	Causes severe skin burns and eye damage. pH: 11.5
Serious eye damage/irritation	Causes 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.
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified

HIT-RE 500 V3, B	
Density	1.31 g/cm ³
Viscosity, dynamic	50 - 70 Pa·s HN-0333

Potential adverse human health effects and symptoms	No additional information available
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SECTION 12: Ecological information

According to the National Code of Practice for the Preparation of Material Safety Data Sheets, Environmental classification information is not mandatory. Information relevant for GHS classification is available on request

12.1. Ecotoxicity

Ecology - water	Harmful to aquatic life with long lasting effects.
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HIT-RE 500 V3, B

Safety Data Sheet

according to the Model Work Health and Safety Regulations

Hazardous to the aquatic environment, short-term (acute)

Not classified

Hazardous to the aquatic environment, long-term (chronic)

Not classified

Other information

Avoid release to the environment.

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
Log Pow	0.27 (Estimated value)
Phenol, styrenated (61788-44-1)	
LC50 fish 1	5.6 mg/l
LC50 other aquatic organisms 1	9.7 mg/l
EC50 Daphnia 1	1.44 mg/l
NOEC (acute)	3.2 mg/l
BCF fish 2	3246 mg/l
Log Pow	6.24 - 7.77 (Experimental value; OECD 123: Partition Coefficient (1-Octanol/Water): Slow-Stirring Method)
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 Daphnia 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 Daphnia 1	10 - 100 mg/l (Invertebrata; Estimated value)
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)
Log Pow	0.77 (Literature; 0.219; Experimental value; Equivalent or similar to OECD 107; 21.5 °C)
Log Koc	1.32 (log Koc, Calculated value)
Threshold limit algae 1	10 - 100, Algae
Threshold limit algae 2	84 mg/l (72 h; Scenedesmus subspicatus; Growth rate)

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	

HIT-RE 500 V3, B

Safety Data Sheet

according to the Model Work Health and Safety Regulations

12.3. Bioaccumulative potential

HIT-RE 500 V3, B	
Bioaccumulative potential	Not established.
2-methyl-1,5-pentanediamine (15520-10-2)	
Log Pow	See section 12.1 on ecotoxicology
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).
Phenol, styrenated (61788-44-1)	
BCF fish 2	See section 12.1 on ecotoxicology
Log Pow	See section 12.1 on ecotoxicology
Bioaccumulative potential	Bioaccumulative potential.
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
Log Pow	See section 12.1 on ecotoxicology
Log Koc	See section 12.1 on ecotoxicology
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).

12.4. Mobility in soil

2-methyl-1,5-pentanediamine (15520-10-2)	
Log Pow	See section 12.1 on ecotoxicology
Phenol, styrenated (61788-44-1)	
Log Pow	See section 12.1 on ecotoxicology
Ecology - soil	No (test)data on mobility of the substance available.
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
Log Pow	See section 12.1 on ecotoxicology
Log Koc	See section 12.1 on ecotoxicology
Ecology - soil	Highly mobile in soil.

12.5. Other adverse effects

Ozone	Not classified
Other adverse effects	No additional information available

HIT-RE 500 V3, B	
Fluorinated greenhouse gases	False
2-methyl-1,5-pentanediamine (15520-10-2)	
Fluorinated greenhouse gases	False
Phenol, styrenated (61788-44-1)	
Fluorinated greenhouse gases	False
m-Xylylenediamine (1477-55-0)	
Fluorinated greenhouse gases	False
3-Aminopropyltriethoxysilan (919-30-2)	
Fluorinated greenhouse gases	False
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
Fluorinated greenhouse gases	False

SECTION 13: Disposal considerations

Regional legislation (waste)	Disposal must be done according to official regulations.
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HIT-RE 500 V3, B

Safety Data Sheet

according to the Model Work Health and Safety 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

ADR	IMDG	IATA	RID
14.1. UN number			
3259	3259	3259	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
No supplementary information available			

14.6. Special precautions for user

Specific storage requirement

No data available

Shock sensitivity

No data available

14.7. Additional information

Other information

No supplementary information available

Transport by road and rail

Not applicable

Transport by sea

UN-No. (IMDG)	3259
Special provisions (IMDG)	274
Limited quantities (IMDG)	1 kg
Packing instructions (IMDG)	P002

HIT-RE 500 V3, B

Safety Data Sheet

according to the Model Work Health and Safety Regulations

EmS-No. (Fire)	F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES
Stowage category (IMDG)	A
Stowage and segregation (IMDG)	Separated from' acids.
MFAG-No	154

Air transport

UN-No. (IATA)	3259
PCA packing instructions (IATA)	859
PCA max net quantity (IATA)	15kg
CAO packing instructions (IATA)	863
Special provisions (IATA)	A3

14.8. Hazchem or Emergency Action Code

Hazchem Code	Not applicable
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SECTION 15: Regulatory information

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

No additional information available

15.2. International agreements

No additional information available

SECTION 16: Any other relevant information

Indication of changes:

Section	Changed item	Change	Comments
2.1	Classification (GHS AU)	Modified	
3.2	Composition/information on ingredients	Modified	

HIT-RE 500 V3, B

Safety Data Sheet

according to the Model Work Health and Safety Regulations

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

Revision date 13/05/2020

Other information None.

Classification:

Skin Corr. 1B	H314
Eye Dam. 1	H318
Skin Sens. 1	H317
STOT SE 3	H335

Full text of H-statements:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Flam. Liq. 4	Flammable liquids, Category 4
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H227	Combustible liquid
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.



HIT-RE 500 V3, B

Safety Data Sheet

according to the Model Work Health and Safety Regulations

H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

SDS_AU_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, A

Safety Data Sheet

according to the Model Work Health and Safety Regulations

Issue date: 13/05/2020

Revision date: 13/05/2020

Supersedes: 25/02/2019

Version: 2.3

SECTION 1: Identification : Product identifier and chemical identity

1.1. Product identifier

Product form	Mixture
Product name	HIT-RE 500 V3, A
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

Supplier	Department issuing data specification sheet
Hilti (Aust.) Pty. Ltd. Level 5, 1G Homebush Bay Drive P.O. Box 3217 2138 Rhodes NSW - Australia T +61 131 292 - F +61 1300 135 042 serviceaustralia@hilti.com	Hilti Entwicklungsgesellschaft mbH Hiltistraße 6 86916 Kaufering - Deutschland T +49 8191 906876 anchor.hse@hilti.com

1.4. Supplier's details

Hilti (Aust.) Pty. Ltd.
Level 5, 1G Homebush Bay Drive
P.O. Box 3217
2138 Rhodes NSW - Australia
T +61 131 292 - F +61 1300 135 042
serviceaustralia@hilti.com

1.5. Emergency phone number

Emergency number +61 2 8748 1000

SECTION 2: Hazards identification

2.1. Classification of the hazardous chemical

Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Skin corrosion/irritation, Category 1C	H314
Skin sensitisation, Category 1	H317
Germ cell mutagenicity, Category 2	H341
Reproductive toxicity, Category 1B	H360

2.2. Label elements

Hazard pictograms (GHS AU)



GHS05

GHS07

GHS08

Signal word (GHS AU)

Danger

Contains

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (25 - 40 %);
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (10-20 %); butanedioldiglycidyl ether (5 - 10 %); trimethylolpropane triglycidylether (5 - 10 %)

Hazard statements (GHS AU)

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

HIT-RE 500 V3, A

Safety Data Sheet

according to the Model Work Health and Safety Regulations

Precautionary statements (GHS AU)

H360 - May damage fertility or the unborn child.
P280 - Wear eye protection, protective clothing, protective gloves.
P262 - Do not get in eyes, on skin, or on clothing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P302+P352 - IF ON SKIN: Wash with plenty of water/...

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

Name	CAS-No.	%	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	1675-54-3	25 - 40	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	9003-36-5	10-20	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317
butanedioldiglycidyl ether	2425-79-8	5 - 10	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317
trimethylolpropane triglycidylether	30499-70-8	5 - 10	Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 Muta. 2, H341 Repr. 1B, H360
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	2530-83-8	2.5 - 5	Eye Dam. 1, H318

SECTION 4: First aid measures

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

4.2. Symptoms caused by exposure

Symptoms/effects after inhalation	May cause an allergic skin reaction.
Symptoms/effects after skin contact	Causes skin irritation.
Symptoms/effects after eye contact	Causes serious eye irritation.

HIT-RE 500 V3, A

Safety Data Sheet

according to the Model Work Health and Safety Regulations

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

Hazardous decomposition products in case of fire Thermal decomposition generates : Carbon dioxide. Carbon monoxide.

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. 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 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. On land, sweep or shovel into suitable containers. Store away from other materials.

SECTION 7: Handling and storage, including how the chemical may be safely used

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.

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.

HIT-RE 500 V3, A

Safety Data Sheet

according to the Model Work Health and Safety Regulations

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.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters - exposure standards

HIT-RE 500 V3, A		
Australia	Local name	Quartz [Silica – Crystalline]
Australia	TWA (mg/m ³)	0.05 mg/m ³ respirable dust
Australia	Remark (AU)	Carcinogenicity Category 1A – Known to have carcinogenic potential for humans. The classification of a chemical into this category is based largely on human evidence from studies that have established a causal relationship between human exposure and the development of cancer.
Australia	Regulatory reference	Workplace exposure standards for airborne contaminants (2019)

Exposure limit values for the other components

8.2. Monitoring

No additional information available

8.3. Appropriate engineering controls

Appropriate engineering controls No specific measures identified.

8.4. Personal protective equipment

Personal protective equipment	Safety glasses. Gloves. Protective clothing. Avoid all unnecessary exposure.
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)	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	> 0,4	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



Environmental exposure controls

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

HIT-RE 500 V3, A

Safety Data Sheet

according to the Model Work Health and Safety Regulations

Consumer exposure controls	Avoid contact during pregnancy/while nursing.
Other information	Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

Physical state	Solid
Appearance	Thixotropic paste.
Colour	Light grey
Odour	characteristic
Odour threshold	No data available
pH	6.6
Relative evaporation rate (butylacetate=1)	No data available
Melting point / Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Auto-ignition temperature	No data available
Flammability (solid, gas)	No data available
Vapour pressure	No data available
Relative density	No data available
Density	1.45 g/cm ³
Solubility	insoluble in water.
Log Pow	No data available
Viscosity	Viscosity, dynamic : 45 - 59 Pa·s 23 °C
Explosive properties	No data available
Explosive limits	No data available
Minimum ignition energy	No data available
Fat solubility	No data available

SECTION 10: Stability and reactivity

Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	No additional information available.
Conditions to avoid	Direct sunlight. Extremely high or low temperatures.
Incompatible materials	Strong acids. Strong bases.
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

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

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	
LD50 oral rat	> 5000 mg/kg bodyweight (Rat; ECHA)
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)

HIT-RE 500 V3, A

Safety Data Sheet

according to the Model Work Health and Safety Regulations

butanedioldiglycidyl ether (2425-79-8)	
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)
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)	
LD50 dermal rat	> 2000 mg/kg (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)

Skin corrosion/irritation	Causes severe skin burns and eye damage. pH: 6.6
Serious eye damage/irritation	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

HIT-RE 500 V3, A	
Density	1.45 g/cm ³
Viscosity, dynamic	45 - 59 Pa·s 23 °C

Potential adverse human health effects and symptoms	No additional information available
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SECTION 12: Ecological information

According to the National Code of Practice for the Preparation of Material Safety Data Sheets, Environmental classification information is not mandatory. Information relevant for GHS classification is available on request

12.1. Ecotoxicity

Ecology - water	Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	Not classified
Hazardous to the aquatic environment, long-term (chronic)	Not classified
Other information	Avoid release to the environment.

butanedioldiglycidyl ether (2425-79-8)	
LC50 fish 1	24 mg/l (96 h; Pisces) ECHA
LC50 other aquatic organisms 1	> 160 mg/l
NOEC (acute)	40 mg/l
Log Pow	-0.15
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 Daphnia 1	473 - 710 mg/l (48 h; Daphnia magna)
Log Pow	-0.92 (Estimated value)
Threshold limit algae 1	119 mg/l (7 days; Anabaena flosaquae)
Threshold limit algae 2	250 mg/l (72 h; Selenastrum capricornutum)

HIT-RE 500 V3, A

Safety Data Sheet

according to the Model Work Health and Safety Regulations

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)	
LC50 fish 1	2.3 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, Nominal concentration)
LC50 fish 2	2.3 mg/l (96 h; Oncorhynchus mykiss; Nominal concentration)
EC50 Daphnia 1	2 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)
BCF other aquatic organisms 1	31 (Estimated value, Fresh weight)
Log Pow	3 (Estimated value, 25 °C)
Log Koc	2.65 (log Koc, SRC PCKOCWIN v2.0, QSAR)
Threshold limit algae 1	> 11 mg/l (72 h; Scenedesmus sp.)
Threshold limit algae 2	4.2 mg/l (72 h; Scenedesmus sp.)

12.2. Persistence and degradability

HIT-RE 500 V3, A	
Persistence and degradability	May cause long-term adverse effects in the environment.
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
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)	
Not rapidly degradable	
Persistence and degradability	Not readily biodegradable in water.
trimethylolpropane triglycidylether (30499-70-8)	
Not rapidly degradable	

12.3. Bioaccumulative potential

HIT-RE 500 V3, A	
Bioaccumulative potential	Not established.
butanedioldiglycidyl ether (2425-79-8)	
Log Pow	See section 12.1 on ecotoxicology
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)	
Log Pow	See section 12.1 on ecotoxicology
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)	
BCF other aquatic organisms 1	See section 12.1 on ecotoxicology
Log Pow	See section 12.1 on ecotoxicology
Log Koc	See section 12.1 on ecotoxicology
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

butanedioldiglycidyl ether (2425-79-8)	
Log Pow	See section 12.1 on ecotoxicology
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)	
Log Pow	See section 12.1 on ecotoxicology
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)	
Surface tension	59 mN/m (20 °C, 0.09 g/l)
Log Pow	See section 12.1 on ecotoxicology
Log Koc	See section 12.1 on ecotoxicology
Ecology - soil	Low potential for adsorption in soil.

12.5. Other adverse effects

Ozone	Not classified
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HIT-RE 500 V3, A

Safety Data Sheet

according to the Model Work Health and Safety Regulations

Other adverse effects No additional information available

HIT-RE 500 V3, A	
Fluorinated greenhouse gases	False

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	
Fluorinated greenhouse gases	False

butanedioldiglycidyl ether (2425-79-8)	
Fluorinated greenhouse gases	False

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)	
Fluorinated greenhouse gases	False

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)	
Fluorinated greenhouse gases	False

trimethylolpropane triglycidylether (30499-70-8)	
Fluorinated greenhouse gases	False

SECTION 13: Disposal considerations

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

ADR	IMDG	IATA	RID
14.1. UN number			
1759	1759	1759	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/ENVIRONMENTALLY 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

HIT-RE 500 V3, A

Safety Data Sheet

according to the Model Work Health and Safety Regulations

ADR	IMDG	IATA	RID
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

Specific storage requirement	No data available
Shock sensitivity	No data available

14.7. Additional information

Other information	No supplementary information available
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Transport by road and rail

Not applicable

Transport by sea

UN-No. (IMDG)	1759
Special provisions (IMDG)	223, 274
Packing instructions (IMDG)	P002, LP02
EmS-No. (Fire)	F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES
Stowage category (IMDG)	A

Air transport

UN-No. (IATA)	1759
PCA packing instructions (IATA)	860
PCA max net quantity (IATA)	25kg
CAO packing instructions (IATA)	864
Special provisions (IATA)	A3, A803

14.8. Hazchem or Emergency Action Code

Hazchem Code	Not applicable
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SECTION 15: Regulatory information

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

No additional information available

15.2. International agreements

No additional information available

SECTION 16: Any other relevant information

Indication of changes:

Composition/information on ingredients. Hazards identification. Added.

Section	Changed item	Change	Comments
3.2	Composition/information on ingredients	Modified	
9.1	pH	Added	

HIT-RE 500 V3, A

Safety Data Sheet

according to the Model Work Health and Safety Regulations

14	Transport information	Modified	
16	Additional information	Added	

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

Revision date

13/05/2020

Other information

None.

Classification:

Skin Corr. 1C	H314
Skin Sens. 1	H317
Muta. 2	H341
Repr. 1B	H360

Full text of H-statements:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Muta. 2	Germ cell mutagenicity, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
Skin Corr. 1C	Skin corrosion/irritation, Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.



HIT-RE 500 V3, A

Safety Data Sheet

according to the Model Work Health and Safety Regulations

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.
H411	Toxic to aquatic life with long lasting effects.

SDS_AU_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.