

## **HIT-RE 500**

#### Safety information for 2-Component-products

Date of issue: 08/08/2018

Revision date: 08/08/2018

Supersedes: 20/10/2017

Version: 9.2

#### **SECTION 1: Kit identification**

#### **1.1 Product identifier**

Product name



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 1A	H314
Serious eye damage/eye irritation, Category 1	H318
Skin sensitisation, Category 1	H317
Reproductive toxicity, Category 1B	H360
Hazardous to the aquatic environment — Acute Hazard, Category 2	H401
Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411

#### 2.2. Label elements

Hazard pictograms (GHS-AU)



Signal word (GHS-AU)

08/08/2018



## **HIT-RE 500**

Safety information for 2-Component-products

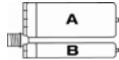
Hazard statements (GHS-AU)	H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction. H360 - May damage fertility or the unborn child. H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (GHS-AU)	<ul> <li>P280 - Wear protective gloves/protective clothing/eye protection/face protection.</li> <li>P262 - Do not get in eyes, on skin, or on clothing.</li> <li>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.</li> <li>P337+P313 - If eye irritation persists: Get medical advice/attention.</li> <li>P302+P352 - IF ON SKIN: Wash with plenty of water/</li> </ul>

#### 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, A		1	pcs (pieces)	Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 1B, H360F Aquatic Chronic 2, H411
HIT-RE 500, B		1	pcs (pieces)	Skin Corr. 1A, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412

### **SECTION 4: General advice**

General advice

For professional users only

SECTION 5: Safe handling advice	ce
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.



## **HIT-RE 500**

Safety information for 2-Component-products

Collect spillage.
Sources of ignition Direct sunlight
Strong bases Strong acids
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
Drink plenty of water Do not induce vomiting Rinse mouth Immediately call a POISON CENTER/doctor
Remove person to fresh air and keep comfortable for breathing.
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.
Never give anything by mouth to an unconscious person If you feel unwell, seek medical advice (show the label where possible)
Causes severe skin burns and eye damage.
Causes serious eye damage.
May cause an allergic skin reaction.
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



Safety Data Sheet

according to the Model Work Health and Safety Regulations Date of issue:08/08/2018 Revision date:08/08/2018

Supersedes: 20/10/2017

Version: 8.4

## **SECTION 1: Identification : Product identifier and chemical identity**

1.1.	Product identifier	
Product for	orm	Mixture
Product n	ame	HIT-RE 500, B
Product c	ode	BU Anchor

#### 1.2. Other means of identification

No additional information available

#### 1.3. Recommended use of the chemical and restrictions on use

No additional information available

### 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 287481000

## **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 1A	H314
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 —	H412
Chronic Hazard, Category 3	

#### 2.2. Label elements

Hazard pictograms (GHS-AU)

	GHS05 GHS07
Signal word (GHS-AU)	Danger
Contains	m-Xylylenediamine (35 - 45 %)
Hazard statements (GHS-AU)	H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (GHS-AU)	<ul> <li>P280 - Wear protective gloves/protective clothing/eye protection/face protection.</li> <li>P262 - Do not get in eyes, on skin, or on clothing.</li> <li>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.</li> <li>P337+P313 - If eye irritation persists: Get medical advice/attention.</li> </ul>



Safety Data Sheet

according to the Model Work Health and Safety Regulations

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)
m-Xylylenediamine	1477-55-0	35 - 45	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Acute 3, H402 Aquatic Chronic 3, H412

## **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	Drink plenty of water. 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.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Other medical advice or treatment

Treat symptomatically.

<b>SECTION 5: Firefighting measures</b>	
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	Thermal decomposition generates :	Carbon dioxide.	Carbon monoxide.
fire			



Safety Data Sheet

according to the Model Work Health and Safety Regulations

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	.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 Emergency procedures	Use personal protective equipment as required. Equip cleanup crew with proper protection. 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.
7.2. Conditions for safe storage, in	cluding 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

m-Xylylenediamine (1477-55-0)		
Australia	Local name	m-Xylene-alpha,alpha'-diamine



### Safety Data Sheet

according to the Model Work Health and Safety Regulations

m-Xylylenediamine (1477-55-0)		
Australia	OEL - Ceilings (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup>
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

No additional information available

#### 8.4. Personal protective equipment

#### Personal protective equipment

Hand protection

Safety glasses. Gloves. Protective clothing. Avoid all unnecessary exposure.

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.

Туре	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				

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

Skin and body protection



Wear suitable protective clothing

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

Physical state	Solid
Appearance	
	Thixotropic paste.
Colour	red
Odour	Amine-like
Odour threshold	No data available
рН	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



Safety Data Sheet

according to the Model Work Health and Safety Regulations

Flammability (solid, gas)	No data available
Vapour pressure	No data available
Relative density	No data available
Density	Density : 1.41 g/cm <sup>3</sup> DIN EN ISO 1183-3
Solubility	insoluble in water.
Log Pow	No data available
Viscosity	Viscosity, dynamic : 50 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

<b>SECTION 10: Stability and rea</b>	ctivity
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.

SECTION 11: Toxicological information		
Acute toxicity (oral)	Not classified	
Acute toxicity (dermal)	Not classified	
Acute toxicity (inhalation)	Not classified	

m-Xylylenediamine (1477-55-0)		
LD50 oral rat	1090 mg/kg	
LD50 oral	660 mg/kg	
LD50 dermal rat	> 3100 mg/kg	
LD50 dermal	2000 mg/kg	
LC50 inhalation rat (Dust/Mist - mg/l/4h)	1.34 mg/l/4h	
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	Not classified	
STOT-repeated exposure	Not classified	
Aspiration hazard	Not classified	
HIT-RE 500, B		
Viscosity, kinematic	35460.993 mm²/s	
Density	1.41 g/cm <sup>3</sup> DIN EN ISO 1183-3	
Viscosity, dynamic	50 Pa.s HN-0333	



Safety Data Sheet

40.4

according to the Model Work Health and Safety Regulations

Potential adverse human health effects and symptoms

Based on available data, the classification criteria are not met

## 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.
Acute aquatic toxicity	Harmful to aquatic life.
Chronic aquatic toxicity	Harmful to aquatic life with long lasting effects.
Other information	Avoid release to the environment.
m-Xylylenediamine (1477-55-0)	
LC50 fish 1	75 mg/l
LC50 other aquatic organisms 1	20.3 ppb
ECE0 Dephoie 1	15 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

#### 12.2. Persistence and degradability

May cause long-term adverse effects in the environment.

### 12.3. Bioaccumulative potential

HIT-RE 500, B	
Bioaccumulative potential	Not established.

### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

Ozone Other adverse effects	Not classified No additional information available
HIT-RE 500, B	
Fluorinated greenhouse gases	False
m-Xylylenediamine (1477-55-0)	
Fluorinated greenhouse gases	False

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.



Safety Data Sheet

according to the Model Work Health and Safety Regulations

ADR	IMDG	ΙΑΤΑ	RID
14.1. UN number			
3259	3259	3259	3259
14.2. UN proper shipping	name		
AMINES, SOLID, CORROSIVE, N.O.S. (m-Xylylenediamine)	AMINES, SOLID, CORROSIVE, N.O.S. (m-Xylylenediamine)	Amines, solid, corrosive, n.o.s. (m- Xylylenediamine)	AMINES, SOLID, CORROSIVE, N.O.S. (m-Xylylenediamine)
Transport document descrip	tion		
UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (m- Xylylenediamine), 8, II, (E)	UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (m- Xylylenediamine), 8, II	UN 3259 Amines, solid, corrosive, n.o.s. (m-Xylylenediamine), 8, II	UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (m- Xylylenediamine), 8, II
14.3. Transport hazard cla	ass(es)		
8	8	8	8
	8	8	8
8			
8 14.4. Packing group	ÿ.		
8 14.4. Packing group			11
			11

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	
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	
8/08/2018 EN (English)		10/20



## Safety Data Sheet

according to the Model Work Health and Safety Regulations

859
15kg
863
A3

#### 14.8. Hazchem or Emergency Action Code

Hazchemcode

Not applicable

## 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 releva	
evision date	08/08/2018
ther information	None.
Classification:	
Skin Corr. 1A	H314
Eye Dam. 1	H318
Skin Sens. 1	H317
Aquatic Acute 3	H402
Aquatic Chronic 3	H412
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 Acute 3	Hazardous to the aquatic environment — Acute Hazard, Category 3
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Sens. 1	Skin sensitisation, Category 1
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H402	Harmful to aquatic life
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



Safety Data Sheet

according to the Model Work Health and Safety Regulations Date of issue:08/08/2018 Revision date:08/08/2018

Supersedes: 20/10/2017

Version: 9.2

## **SECTION 1: Identification : Product identifier and chemical identity**

1.1.	Product identifier	
Product for	orm	Mixture
Product n	ame	HIT-RE 500, A
Product c	ode	BU Anchor

#### 1.2. Other means of identification

No additional information available

#### 1.3. Recommended use of the chemical and restrictions on use

No additional information available

#### 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
Serious eye damage/eye irritation, Category 1	H318
Skin sensitisation, Category 1	H317
Reproductive toxicity, Category 1B	H360
Hazardous to the aquatic environment — Acute	H401
Hazard, Category 2	
Hazardous to the aquatic environment —	H411
Chronic Hazard, Category 2	

#### 2.2. Label elements

Hazard pictograms (GHS-AU)				₩2
	GHS05	GHS07	GHS08	GHS09
Signal word (GHS-AU)	Danger			
Contains	Formaldehyde, o 25 %); Reaction	ligomeric reaction products of hexan	n products with ne-1,6-diol with	ethylene)]bisoxirane (25 - 40 %); 1-chloro-2,3-epoxypropane and phenol (10 - 2-(chloromethyl) (10 - 25 %); 1,3 Propanediol, omethyl)oxirane (5 - 10 %)
Hazard statements (GHS-AU)	H314 - Causes s H317 - May caus H360 - May dama H411 - Toxic to a	e an allergic skin age fertility or the	reaction. unborn child.	-
Precautionary statements (GHS-AU)	P280 - Wear prot	ective gloves/pro	tective clothing	y/eye protection/face protection.





according to the Model Work Health and Safety Regulations

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 Acute 2, H401 Aquatic Chronic 2, H411
Formaldehyde, oligomeric reaction products with 1- chloro-2,3-epoxypropane and phenol	9003-36-5	10 - 25	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
Reaction products of hexane-1,6-diol with 2- (chloromethyl)	933999-84-9	10 - 25	Acute Tox. 5 (Oral), H303 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Aquatic Acute 3, H402 Aquatic Chronic 3, H412
1,3 Propanediol, 2 ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane	30499-70-8	5 - 10	Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 1B, H360 Aquatic Chronic 2, H411

### SECTION 4: First aid measures

4.1. Description of first aid measu	ires	
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. Assure fresh air breathing. 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. Drink plenty of water. Get medical advice/attention. Do not induce vomiting. Obtain emergency medical attention.	
4.2. Symptoms caused by exposu	Ire	
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.	

#### 4.3. Indication of any immediate medical attention and special treatment needed

Other medical advice or treatment

Treat symptomatically.



Safety Data Sheet

according to the Model Work Health and Safety Regulations

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 subs	stance 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, protectiv	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 Emergency procedures	Use personal protective equipment as required. Equip cleanup crew with proper protection. 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 con-	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.	
7.2. Conditions for safe storage, in	cluding 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.	



Safety Data Sheet

according to the Model Work Health and Safety Regulations

### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters - exposure standards

#### Exposure limit values for the other components

#### 8.2. Monitoring

No additional information available

#### 8.3. Appropriate engineering controls

No additional information available

#### 8.4. Personal protective equipment

#### Personal protective equipment

Hand protection

Safety glasses. Gloves. Protective clothing. Avoid all unnecessary exposure.

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.

Туре	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				
Туре	Use	0	Characteristics	Standard

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

Skin and body protection

Other information



Wear suitable protective clothing



Avoid release to the environment. Avoid contact during pregnancy/while nursing. 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
рН	No data available
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



Safety Data Sheet according to the Model Work Health and Safety Regulations

Auto-ignition temperature	No data available
Flammability (solid, gas)	No data available
Vapour pressure	No data available
Relative density	No data available
Density	Density : 1.46 g/ml DIN EN ISO 1183-3
Solubility	insoluble in water.
Log Pow	No data available
Viscosity	Viscosity, dynamic : 36 - 53 Pa.s HN-0333
Explosive properties	Product is not explosive.
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.	

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)	
LD50 dermal rat	> 2000 mg/kg bodyweight (Rat; ECHA)	
Reaction products of hexane-1,6-diol with 2-	(chloromethyl) (933999-84-9)	
LD50 oral rat	3010 mg/kg	
LD50 dermal rat	> 2000 mg/kg	
Skin corrosion/irritation Causes severe skin burns and eye damage.		
Serious eye damage/irritation	Causes serious eye damage.	
Respiratory or skin sensitisation	May cause an allergic skin reaction.	
Germ cell mutagenicity	Not classified	
Carcinogenicity	Not classified	
Reproductive toxicity	May damage fertility or the unborn child.	
STOT-single exposure	Not classified	
STOT-repeated exposure	Not classified	
Aspiration hazard	Not classified	
HIT-RE 500, A		
Density	1.46 g/ml DIN EN ISO 1183-3	



## Safety Data Sheet

according to the Model Work Health and Safety Regulations

HIT-RE 500, A	
Viscosity, dynamic	36 - 53 Pa.s HN-0333
Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met

### **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.
Acute aquatic toxicity	Toxic to aquatic life.
Chronic aquatic toxicity	Toxic to aquatic life with long lasting effects.

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Other information
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Avoid release to the environment.

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 Daphnia 1	1.7 mg/l	
ErC50 (algae)	> 11 mg/l (EPA 660/3 - 75/009, 72 h, Scenedesmus sp., Static system, Fresh water, Experimental value)	
BCF other aquatic organisms 1	31 (Estimated value, Fresh weight)	
Log Pow	>= 2.918 (Experimental value; EU Method A.8: Partition Coefficient; 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.)	
Reaction products of hexane-1,6-diol with 2-(chloromethyl) (933999-84-9)		
LC50 fish 1	30 mg/l	
LC50 other aquatic organisms 1	23.1 mg/l	
EC50 Daphnia 1	47 mg/l	
NOEC (acute)	18 mg/l	

#### 12.2. Persistence and degradability

#### HIT-RE 500, 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

#### 12.3. **Bioaccumulative potential**

HIT-RE 500, A		
Bioaccumulative potential Not established.		
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 bioaccumulation potential (BCF < 500).	

#### 12.4. Mobility in soil

ĺ	2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)		
	Surface tension	58.7 - 58.9 mN/m (20 °C, EU Method A.5: Surface tension)	



Safety Data Sheet

according to the Model Work Health and Safety Regulations

2,2'-[(1-methylethylidene)bis(4,1-phenyleneo	xymethylene)]bisoxirane (1675-54-3)
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
Other adverse effects	No additional information available
HIT-RE 500, A	
Fluorinated greenhouse gases	False
2,2'-[(1-methylethylidene)bis(4,1-phenyleneo	xymethylene)]bisoxirane (1675-54-3)
Fluorinated greenhouse gases False	
Formaldehyde, oligomeric reaction products	with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)
Fluorinated greenhouse gases False	
Reaction products of hexane-1,6-diol with 2-	(chloromethyl) (933999-84-9)
Fluorinated greenhouse gases	False
1,3 Propanediol, 2 ethyl-2-(hydroxymethyl)-, I	polymer with 2-(chloromethyl)oxirane (30499-70-8)
Fluorinated greenhouse gases	False
SECTION 13: Disposal considerat	tions
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 partial	

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. Avoid release to the environment.

Ecology - waste materials

SECTION 14: Transport information			
ADR	IMDG	ΙΑΤΑ	RID
14.1. UN number			
Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping r	name		
Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard clas	ss(es)		
Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group			
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards			
Not regulated	Not regulated	Not regulated	Not regulated
Environmentally hazardous substances derogation applies (quantity of liquids ≤ 5 litres or net mass of solids ≤ 5 kg)			
not restricted according ADR Special Provision SP375, IATA-DGR Special Provision A197 and IMDG-Code 2.10.2.7			

#### 14.6. Special precautions for user

Specific storage requirement

No data available



### Safety Data Sheet

according to the Model Work Health and Safety Regulations

Shock sensitivity	No data available	
14.7. Additional information		
Other information	not restricted according ADR Special Provision SP375, IATA-DGR Special Provision A197 and IMDG-Code 2.10.2.7	
Transport by road and rail		
Not applicable		
Transport by sea		
Not applicable		
Air transport		
Special provisions (IATA)	A197	
14.8. Hazchem or Emergency Action Co	ode	
Hazchemcode	Not applicable	

## 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. Modified.

Revision date	08/08/2018
Other information	None.

Classification:

Skin Corr. 1C	H314
Eye Dam. 1	H318
Skin Sens. 1	H317
Repr. 1B	H360
Aquatic Acute 2	H401
Aquatic Chronic 2	H411
Full text of H-statements:	
Acute Tox. 5 (Oral)	Acute toxicity (oral), Category 5
Aquatic Acute 2	Hazardous to the aquatic environment — Acute Hazard, Category 2
Aquatic Acute 3	Hazardous to the aquatic environment — Acute Hazard, Category 3
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
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
H303	May be harmful if swallowed



Safety Data Sheet

according to the Model Work Health and Safety Regulations

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.
H360	May damage fertility or the unborn child.
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.

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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