

## **HIT-RE 100**

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

Issue date: 18/11/2022 Revision date: 18/11/2022 Supersedes: 11/05/2020 Version: 3.1

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

#### 1.1 Product identifier

Product name HIT-RE 100
Product code BU Anchor



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

Hilti France S.A.S.
126 rue Gallieni
92100 Boulogne-Billancourt - France
T +33 825 01 05 05
fr-contactez-nous@hilti.com

#### **SECTION 2: General information**

Storage temperature : 5 - 25 °C

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

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

## **SECTION 3: Kit contents**

#### **Classification of the Product**

## Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. 4 (Oral) H302 Skin Corr. 1B H314 Eye Dam. 1 H318 Skin Sens. 1 H317 Muta. 2 H341 Repr. 1B H360F Aquatic Chronic 2 H411

Full text of H- and EUH-statements: see section 16

#### **Label elements**

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS07

GHS05





GHS08

1/32



## **HIT-RE 100**

#### Kit Safety Information Sheet (SIS)

Signal word (CLP) Danger

Hazardous ingredients Epoxy resin, Amines

Hazard statements (CLP) H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction. H341 - Suspected of causing genetic defects.

H360F - May damage fertility.

H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) P280 - Wear eye protection, protective clothing, protective gloves.

P262 - Do not get in eyes, on skin, or on clothing.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. P302+P352 - IF ON SKIN: Wash with plenty of water.

P337+P313 - If eye irritation persists: Get medical advice/attention. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

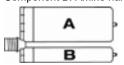
Extra phrases

#### **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 Regulation (EC) No. 1272/2008 [CLP]
HIT-RE 100, A		1	pcs (pieces)	Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Muta. 2, H341 Repr. 1B, H360F Aquatic Chronic 2, H411
HIT-RE 100, B		1	pcs (pieces)	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412

#### **SECTION 4: General information**

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

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## **HIT-RE 100**

### Kit Safety Information Sheet (SIS)

Mechanically recover the product

On land, sweep or shovel into suitable containers

Store away from other materials.

For containment Collect spillage.

Incompatible materials Sources of ignition Direct sunlight

Incompatible products Strong bases

Strong acids

### **SECTION 6: First aid measures**

First-aid measures after ingestion

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

Do not induce vomiting

Rinse mouth

Immediately call a POISON CENTER/doctor.

First-aid measures after inhalation Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact Wash with plenty of water/...

Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

If skin irritation or rash occurs: Get immediate medical advice/attention.

First-aid measures general Never give anything by mouth to an unconscious person

If you feel unwell, seek medical advice (show the label where possible)

Symptoms/effects Causes severe skin burns and eye damage.

Symptoms/effects after eye contact Causes serious eye damage.

Symptoms/effects after skin contact May cause an allergic skin reaction.

#### **SECTION 7: Fire fighting measures**

Exercise caution when fighting any chemical fire

Prevent fire fighting water from entering the environment

Protection during firefighting Self-contained breathing apparatus

Do not enter fire area without proper protective equipment, including respiratory protection

Hazardous decomposition products in case of

fire

Thermal decomposition generates :

Carbon dioxide Carbon monoxide

#### **SECTION 8: Other information**

No data available

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## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Issue date: 18/11/2022 Revision date: 18/11/2022 Supersedes version of: 11/05/2020 Version: 2.1

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

#### 1.1. Product identifier

Product form Mixture
Product name HIT-RE 100, B
Product code BU Anchor

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

#### 1.2.1. Relevant identified uses

Industrial/Professional use spec For professional use only

Use of the substance/mixture Composite mortar component for fasteners in the construction industry

#### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Supplier Department issuing data specification sheet

Hilti France S.A.S. Hilti Entwicklungsgesellschaft mbH

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 France
 Deutschland

 T +33 825 01 05 05
 T +49 8191 906876

 fr-contactez-nous@hilti.com
 anchor.hse@hilti.com

#### 1.4. Emergency telephone number

Emergency number Schweizerisches Toxikologisches Informationszentrum – 24h Service

+41 44 251 51 51 (international)

## **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 4 H302
Skin corrosion/irritation, Category 1, Sub-Category 1B H314
Serious eye damage/eye irritation, Category 1 H318
Skin sensitisation, Category 1 H317
Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412

Full text of H- and EUH-statements: see section 16

## Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS05

Danger

GHS07

Signal word (CLP)

Contains Formaldehyde, telomer with 1,3-benzenedimethanamine, 1,3-benzenediol and

ethenylbenzene, resorcinol, m-Xylylenediamine

Hazard statements (CLP) H314 - Causes severe skin burns and eye damage.



## Safety Data Sheet

Precautionary statements (CLP)

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

H317 - May cause an allergic skin reaction.

H412 - Harmful to aquatic life with long lasting effects.

P280 - Wear eye protection, protective clothing, protective gloves.

P262 - Do not get in eyes, on skin, or on clothing.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P302+P352 - IF ON SKIN: Wash with plenty of water.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

#### 2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component			
m-Xylylenediamine (1477-55-0)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII		
Formaldehyde, telomer with 1,3-benzenedimethanamine, 1,3-benzenediol and ethenylbenzene (710292-85-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII		
resorcinol (108-46-3)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII		

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

Component		
m-Xylylenediamine(1477-55-0)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605	
Formaldehyde, telomer with 1,3-benzenedimethanamine, 1,3-benzenediol and ethenylbenzene(710292-85-6)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605	
resorcinol(108-46-3)	ED: not yet assessed	

## **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Not applicable



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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

#### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
m-Xylylenediamine substance with national workplace exposure limit(s) (FR)	CAS-No.: 1477-55-0 EC-No.: 216-032-5 REACH-no: 01-2119480150- 50	25 - 40	Acute Tox. 4 (Oral), H302 (ATE=660 mg/kg bodyweight) Acute Tox. 4 (Inhalation:dust,mist), H332 (ATE=1,34 mg/l/4h) Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 Aquatic Chronic 3, H412
Formaldehyde, telomer with 1,3-benzenedimethanamine, 1,3-benzenediol and ethenylbenzene	CAS-No.: 710292-85-6 EC-No.: 615-240-7 REACH-no: 01-2119950341- 46	10 - 25	Skin Sens. 1B, H317 Aquatic Chronic 2, H411
resorcinol substance with national workplace exposure limit(s) (FR); substance with a Community workplace exposure limit	CAS-No.: 108-46-3 EC-No.: 203-585-2 EC Index-No.: 604-010-00-1 REACH-no: 01-2119480136- 40	0,1 - 1	Acute Tox. 4 (Oral), H302 (ATE=301 mg/kg bodyweight) Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1B, H317 STOT SE 1, H370 STOT SE 2, H371 Aquatic Acute 1, H400 Aquatic Chronic 3, H412

Full text of H- and EUH-statements: see section 16

#### **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. Most important symptoms and effects, both acute and delayed

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

Symptoms/effects after eye contact

Causes serious eye damage.

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

Treat symptomatically.

## **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

Suitable extinguishing media Foam. Dry powder. Carbon dioxide. Water spray. Sand.



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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.

Other information Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

## **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Precautions for safe handling Wear personal protective equipment. Avoid contact with skin and eyes. Wash hands and

other exposed areas with mild soap and water before eating, drinking or smoking and when

leaving work. Avoid contact during pregnancy/while nursing.

Hygiene measures Do not eat, drink or smoke when using this product. Always wash hands after handling the

product. Contaminated work clothing should not be allowed out of the workplace. Wash

contaminated clothing before reuse.

#### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures Comply with applicable regulations.

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

Incompatible products Strong bases. Strong acids.
Incompatible materials Sources of ignition. Direct sunlight.

Storage temperature  $5-25\,^{\circ}\text{C}$ 

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

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### 7.3. Specific end use(s)

No additional information available

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

## 8.1. Control parameters

Additional information

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

#### 8.1.1. National occupational exposure and biological limit values

HIT-RE 100, B	HIT-RE 100, B		
EU - Indicative Occupational Exposure Limit (IOEL)			
Local name	Resorcinol		
IOEL TWA	45 mg/m³		
IOEL TWA [ppm]	10 ppm		
Remark	Skin		
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC		
France - Occupational Exposure Limits			
Local name	Résorcinol		
VME (OEL TWA)	45 mg/m³		
VME (OEL TWA) [ppm]	10 ppm		
VLE (OEL C/STEL)	0,1 mg/m³		
Remark	Valeurs règlementaires indicatives; risque de pénétration percutanée		
Regulatory reference	Arrêté du 30 juin 2004 modifié (réf.: INRS ED 984, 2016)		
resorcinol (108-46-3)			
EU - Indicative Occupational Exposure Limit (IOEL)			
Local name	Resorcinol		
IOEL TWA	45 mg/m³		
IOEL TWA [ppm]	10 ppm		
Remark	Skin		
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC		
France - Occupational Exposure Limits			
Local name	Résorcinol		
VME (OEL TWA)	45 mg/m³		
VME (OEL TWA) [ppm]	10 ppm		
Remark	Valeurs règlementaires indicatives; risque de pénétration percutanée		
Regulatory reference	Arrêté du 30 juin 2004 modifié (réf.: INRS ED 984, 2016)		



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m-Xylylenediamine (1477-55-0)		
France - Occupational Exposure Limits		
Local name	m-Xylène-α,α'-diamine	
VLE (OEL C/STEL)	0,1 mg/m³	
Remark	Valeurs recommandées/admises	
Regulatory reference	Circulaire du Ministère du travail (réf.: INRS ED 984, 2016)	

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### 8.2.2. Personal protection equipment

#### Personal protective equipment:

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

### Personal protective equipment symbol(s):







#### 8.2.2.1. Eye and face protection

#### Eye protection:

Wear security glasses which protect from splashes

Eye protection				
Туре	Field of application	Characteristics	Standard	
Safety glasses	Droplet	clear	EN 166, EN 170	

#### 8.2.2.2. Skin protection

#### Skin and body protection:

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.



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Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	> 0,4		EN ISO 374

#### 8.2.2.3. Respiratory protection

No additional information available

#### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

#### **Environmental exposure controls:**

Avoid release to the environment.

#### Consumer exposure controls:

Avoid contact during pregnancy/while nursing.

#### Other information:

Do not eat, drink or smoke during use. No additional information available

## **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state Solid

Colour Red-brown to black. Appearance Thixotropic paste. Odour Amine-like. Odour threshold Not available Melting point Not available Freezing point Not available Boiling point Not available Flammability Non flammable. **Explosive limits** Not applicable Lower explosion limit Not applicable Upper explosion limit Not applicable Flash point Not applicable Auto-ignition temperature Not applicable Decomposition temperature Not available 11.5

pH 11,5
pH solution Not available
Viscosity, kinematic Not applicable

Viscosity, dynamic 43 – 57 Pa·s HN-0333 Solubility insoluble in water.

Partition coefficient n-octanol/water (Log Kow) Not available

Vapour pressure Not available

Vapour pressure at 50°C Not available

Density 1,41 g/cm³ DIN EN ISO 1183-3

Relative density
Relative vapour density at 20°C
Particle size
Particle size distribution
Particle shape
Particle aspect ratio
Not available
Particle aggregation state
Not available
Not available
Not available



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Particle agglomeration state Not available
Particle specific surface area Not available
Particle dustiness Not available

#### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Corrosive vapours.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No additional information available.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Strong acids. Strong bases.

#### 10.6. Hazardous decomposition products

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

## **SECTION 11: Toxicological information**

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) Harmful if swallowed.
Acute toxicity (dermal) Not classified
Acute toxicity (inhalation) Not classified

HIT-RE 100, B		
ATE CLP (oral) 1706,776 mg/kg bodyweight		
Formaldehyde, telomer with 1,3-benzenedimethanamine, 1,3-benzenediol and ethenylbenzene (710292-85-6)		
LD50 oral rat	> 2000 mg/kg	
LD50 dermal rat	> 2000 mg/kg	
resorcinol (108-46-3)		
LD50 oral	301 mg/kg	
m-Xylylenediamine (1477-55-0)		
LD50 oral rat	1090 mg/kg	
LD50 dermal rat	> 3100 mg/kg	
LD50 dermal	> 3100 mg/kg	



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m-Xylylenediamine (1477-55-0)	
LC50 Inhalation - Rat (Dust/Mist)	1,34 mg/l/4h
Skin corrosion/irritation	On basis of test data
	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
Additional information	Based on available data, the classification criteria are not met
Carcinogenicity	Not classified
Additional information	Based on available data, the classification criteria are not met
resorcinol (108-46-3)	
IARC group	3 - Not classifiable
Reproductive toxicity	Not classified
Additional information	Based on available data, the classification criteria are not met
STOT-single exposure	Not classified
Additional information	Based on available data, the classification criteria are not met
resorcinol (108-46-3)	
STOT-single exposure	Causes damage to organs (central nervous system, blood) (oral). May cause damage to
	organs (respiratory system) (oral).
STOT-repeated exposure	Not classified
Additional information	Based on available data, the classification criteria are not met
Aspiration hazard	Not classified
Additional information	Based on available data, the classification criteria are not met
11.2. Information on other hazards	

#### 11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine

disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and

symptoms

No additional information available

## **SECTION 12: Ecological information**

#### 12.1. Toxicity

Ecology - water Harmful to aquatic life with long lasting effects. Not classified

Hazardous to the aquatic environment, short-term

Hazardous to the aquatic environment, long-term Harmful to aquatic life with long lasting effects.

(chronic)

(4.1.4.1.4)		
Formaldehyde, telomer with 1,3-benzenedimethanamine, 1,3-benzenediol and ethenylbenzene (710292-85-6)		
LC50 - Fish [1] ≥ 50 mg/l		
LC50 - Other aquatic organisms [1]	≥ 31,8 mg/l	
EC50 - Crustacea [1]	2,4 mg/l	
NOEC chronic algae	6,25 mg/l	



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resorcinol (108-46-3)		
EC50 - Crustacea [1] 1,28 mg/l		
m-Xylylenediamine (1477-55-0)		
LC50 - Fish [1]	75 mg/l	
LC50 - Other aquatic organisms [1]	20,3 ppb	
EC50 - Crustacea [1]	15 mg/l	
LOEC (chronic)	15 mg/l	
NOEC (acute)	10,5 mg/kg	
NOEC (chronic)	4,7 mg/l	
NOEC chronic crustacea	4,7 mg/l	

#### 12.2. Persistence and degradability

HIT-RE 100, B	
Persistence and degradability	May cause long-term adverse effects in the environment.

#### 12.3. Bioaccumulative potential

HIT-RE 100, B		
Bioaccumulative potential Not established.		
Formaldehyde, telomer with 1,3-benzenedimethanamine, 1,3-benzenediol and ethenylbenzene (710292-85-6)		
Bioconcentration factor (BCF REACH) ≥ 12,9		
Partition coefficient n-octanol/water (Log Pow)	5,14	

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

#### HIT-RE 100, B

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

#### 12.6. Endocrine disrupting properties

No additional information available

#### 12.7. Other adverse effects

Additional information

Avoid release to the environment.

### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Regional legislation (waste)

Disposal must be done according to official regulations.

Product/Packaging disposal recommendations

After curing, the product can be disposed of with household waste. . Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. Packaging contaminated by the product : Dispose in a safe manner in accordance with local/national regulations.

Avoid release to the environment.

Ecology - waste materials



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European List of Waste (LoW) code

 $08\ 04\ 09^{\star}$  - waste adhesives and sealants containing organic solvents or other dangerous substances

HP Code

 $20\ 01\ 27^*$  - paint, inks, adhesives and resins containing dangerous substances HP3 - "Flammable:"

- flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C;
- flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air;
- flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;
- flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa;
- water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities;
- other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.

## **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / RID

ADR IMDG		IATA	RID
14.1. UN number or ID num	ber		
UN 3259	UN 3259 UN 3259		UN 3259
14.2. UN proper shipping n	ame		
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 descr	iption		
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 clas	ss(es)		
8	8	8	
8	8 8		8
14.4. Packing group	1		
II	II	II	II
14.5. Environmental hazard	ds		1
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	environn	



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### 14.6. Special precautions for user

**Overland transport** 

Classification code (ADR)

Special provisions (ADR)

Limited quantities (ADR)

Packing instructions (ADR)

Mixed packing provisions (ADR)

Transport category (ADR)

C8

274

1kg

P002, IBC08

MP10

Transport category (ADR)

2

Orange plates

80

3259

Tunnel restriction code (ADR)

Transport by sea

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

Air transport

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

Rail transport

Special provisions (RID) 274 Limited quantities (RID) 1kg

Packing instructions (RID) P002, IBC08

#### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

### **SECTION 15: Regulatory information**

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

#### 15.1.1. EU-Regulations

**REACH Annex XVII (Restriction List)** 

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	
3(b)	m-Xylylenediamine	
3(c)	m-Xylylenediamine	

#### **REACH Annex XIV (Authorisation List)**

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

#### **REACH Candidate List (SVHC)**

Contains no substance(s) listed on the REACH Candidate List



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#### **PIC Regulation (Prior Informed Consent)**

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

#### **POP Regulation (Persistent Organic Pollutants)**

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

#### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

#### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

#### **Drug Precursors Regulation (273/2004)**

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. National regulations

#### **France**

Occupational diseases	
Code	Description
RG 65	Eczematiform lesions of allergic mechanism

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## **SECTION 16: Other information**

Indication of changes			
Section	Changed item	Change	Comments
	SDS EU format according to COMMISSION REGULATION (EU) 2020/878	Modified	

Abbreviations and acronyms:			
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways		
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road		
ATE	Acute Toxicity Estimate		
BCF	Bioconcentration factor		
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008		
DMEL	Derived Minimal Effect level		
DNEL	Derived-No Effect Level		
EC50	Median effective concentration		
IARC	International Agency for Research on Cancer		
IATA	International Air Transport Association		
IMDG	International Maritime Dangerous Goods		



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Abbreviations and acronyms:			
LC50	Median lethal concentration		
LD50	Median lethal dose		
LOAEL	Lowest Observed Adverse Effect Level		
NOAEC	No-Observed Adverse Effect Concentration		
NOAEL	No-Observed Adverse Effect Level		
NOEC	No-Observed Effect Concentration		
OECD	Organisation for Economic Co-operation and Development		
PBT	Persistent Bioaccumulative Toxic		
PNEC	Predicted No-Effect Concentration		
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006		
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail		
SDS	Safety Data Sheet		
vPvB	Very Persistent and Very Bioaccumulative		

Other information None.

Full text of H- and EUH-statements:			
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4		
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1		
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		
H302	Harmful if swallowed.		
H314	Causes severe skin burns and eye damage.		
H315	Causes skin irritation.		
H317	May cause an allergic skin reaction.		
H318	Causes serious eye damage.		
H332	Harmful if inhaled.		
H370	Causes damage to organs.		
H371	May cause damage to organs.		
H400	Very toxic to aquatic life.		
H411	Toxic to aquatic life with long lasting effects.		
H412	Harmful to aquatic life with long lasting effects.		
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B		



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Full text of H- and EUH-statements:		
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
Skin Sens. 1	Skin sensitisation, Category 1	
Skin Sens. 1B	Skin sensitisation, category 1B	
STOT SE 1	Specific target organ toxicity – single exposure, Category 1	
STOT SE 2	Specific target organ toxicity – Single exposure, Category 2	

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:			
Acute Tox. 4 (Oral)	H302	Calculation method	
Skin Corr. 1B	H314	On basis of test data	
Eye Dam. 1	H318	Calculation method	
Skin Sens. 1	H317	Calculation method	
Aquatic Chronic 3	H412	Expert judgment	

SDS\_EU\_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.



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Issue date: 18/11/2022 Revision date: 18/11/2022 Supersedes version of: 11/05/2020 Version: 3.1

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

#### 1.1. Product identifier

Product form Mixture Product name HIT-RE 100, A Product code **BU** Anchor

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

#### 1.2.1. Relevant identified uses

Industrial/Professional use spec For professional use only

Use of the substance/mixture Composite mortar component for fasteners in the construction industry

#### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Supplier Department issuing data specification sheet

Hilti France S.A.S. Hilti Entwicklungsgesellschaft mbH

126 rue Gallieni Hiltistraße 6

FR-92100 Boulogne-Billancourt DE- 86916 Kaufering Deutschland France

T+33 825 01 05 05 T +49 8191 906876 fr-contactez-nous@hilti.com anchor.hse@hilti.com

#### 1.4. Emergency telephone number

**Emergency number** Schweizerisches Toxikologisches Informationszentrum – 24h Service

+41 44 251 51 51 (international)

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 1, Sub-Category 1C H314 Serious eye damage/eye irritation, Category 1 H318 Skin sensitisation, Category 1 H317 Germ cell mutagenicity, Category 2 H341 H360F Reproductive toxicity, Category 1B Hazardous to the aquatic environment - Chronic Hazard, Category 2 H411

Full text of H- and EUH-statements: see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

## 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)







GHS05

GHS07

GHS08

GHS09

Signal word (CLP)

Danger



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Contains	2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane, Reaction products of hexane-1,6-diol with 2-(chloromethyl), 1,3 Propanediol, 2 ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane, Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol
Hazard statements (CLP)	H314 - Causes severe skin burns and eye damage.
,	H317 - May cause an allergic skin reaction.
	H341 - Suspected of causing genetic defects.
	H360F - May damage fertility.
	H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (CLP)	P280 - Wear eye protection, protective clothing, protective gloves.
	P262 - Do not get in eyes, on skin, or on clothing.
	P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove
	contact lenses, if present and easy to do. Continue rinsing.
	P302+P352 - IF ON SKIN: Wash with plenty of water.
	P337+P313 - If eye irritation persists: Get medical advice/attention.
	P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

### 2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component			
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII		
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII		
Reaction products of hexane-1,6-diol with 2-(chloromethyl) (933999-84-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII		
1,3 Propanediol, 2 ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane (30499-70-8)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII		

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

Component			
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane(1675-54-3)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605		
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrin disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605		
Reaction products of hexane-1,6-diol with 2-(chloromethyl)(933999-84-9)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605		



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## **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	CAS-No.: 1675-54-3 EC-No.: 216-823-5 REACH-no: 01-2119456619- 26	25 - 40	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	REACH-no: 01-2119454392- 40	10 – 25	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
Reaction products of hexane-1,6-diol with 2-(chloromethyl)	CAS-No.: 933999-84-9 EC-No.: 618-939-5 EC Index-No.: 01- 2119463471-41 REACH-no: 01-2119463471- 41	10 - 25	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412
1,3 Propanediol, 2 ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane	REACH-no: 01-2120078341- 60	5 – 10	Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 Muta. 2, H341 Repr. 1B, H360F Aquatic Chronic 2, H411

Specific concentration limits:					
Name	Product identifier	Specific concentration limits			
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	CAS-No.: 1675-54-3 EC-No.: 216-823-5 REACH-no: 01-2119456619- 26	( 5 ≤C < 100) Skin Irrit. 2, H315 ( 5 ≤C < 100) Eye Irrit. 2, H319			

Full text of H- and EUH-statements: see section 16

## **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).



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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. Most important symptoms and effects, both acute and delayed

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

Symptoms/effects after eye contact Causes serious eye irritation.

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

Treat symptomatically.

## **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.

Other information Dispose of materials or solid residues at an authorized site.



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#### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

## **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Precautions for safe handling Wear personal protective equipment. Avoid contact with skin and eyes. Wash hands and

other exposed areas with mild soap and water before eating, drinking or smoking and when

leaving work.

Hygiene measures Do not eat, drink or smoke when using this product. Always wash hands after handling the

product. Contaminated work clothing should not be allowed out of the workplace. Wash

contaminated clothing before reuse.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions Protect from sunlight.

Incompatible products Strong bases. Strong acids.

Incompatible materials Sources of ignition. Direct sunlight.

Storage temperature 5 – 25 °C

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

#### 7.3. Specific end use(s)

No additional information available

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

#### 8.1. Control parameters

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

relevant for this product

#### 8.1.1. National occupational exposure and biological limit values

HIT-RE 100, A				
France - Occupational Exposure Limits				
Local name	Silice (poussières alvéolaires de quartz)			
VME (OEL TWA)	0,1 mg/m³			
Remark	Valeurs règlementaires contraignantes			
Regulatory reference	Article R4412-149 du Code du travail (réf.: INRS ED 984, 2016; Décret n° 2019-1487; Décret n° 2020-1546; Décret n°2021-434)			

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available



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#### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### 8.2.2. Personal protection equipment

#### Personal protective equipment:

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

#### Personal protective equipment symbol(s):







#### 8.2.2.1. Eye and face protection

#### Eye protection:

Wear security glasses which protect from splashes

Eye protection			
Туре	Field of application	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166, EN 170

#### 8.2.2.2. Skin protection

#### Skin and body protection:

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.

Hand protection						
Type Material		Permeation Thickness (mm)		Penetration	Standard	
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	> 0,4		EN ISO 374	

#### 8.2.2.3. Respiratory protection

No additional information available

#### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

#### **Environmental exposure controls:**

Avoid release to the environment.

#### Consumer exposure controls:

Avoid contact during pregnancy/while nursing.

#### Other information:

Do not eat, drink or smoke during use.

No additional information available



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## **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

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

Explosive properties Product is not explosive.

Explosive limits

Lower explosion limit

Upper explosion limit

Not applicable

Upper explosion limit

Not applicable

Flash point

Not applicable

Auto-ignition temperature

Not applicable

Decomposition temperature

Not available

pH 6,2

pH solution

Viscosity, kinematic

Viscosity, dynamic

Viscosity, dynamic

Solubility

Partition coefficient n-octanol/water (Log Kow)

Vanour pressure

Not available

Not available

Vapour pressure Not available Vapour pressure at 50°C Not available

Density 1,46 g/ml DIN EN ISO 1183-3

Relative density Not available Relative vapour density at 20°C Not applicable Particle size Not available Particle size distribution Not available Particle shape Not available Particle aspect ratio Not available Not available Particle aggregation state Particle agglomeration state Not available Not available Particle specific surface area Particle dustiness Not available

#### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No additional information available.



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#### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

#### 10.5. Incompatible materials

Strong acids. Strong bases.

#### 10.6. Hazardous decomposition products

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

## **SECTION 11: Toxicological information**

11.1. Information on hazar	d classes as defined in	Regulation (FC)	No 1272/2008
TI.I. IIIIOIIIIAUOII OII IIAZAI	u ciasses as utilileu li	i Neuulalioii (EC)	NO 12/2/2000

Acute toxicity (oral)

Acute toxicity (dermal)

Acute toxicity (inhalation)

Not classified

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)

	Reaction r	products	of hexane-1	.6-diol with	2-(chloromethy	۷l)	(933999-84-9)
ı	i touotion p	o o a a o to	OI HOAGHO I	,o aloi with	_ (0111010111011	y • /	(000000 0 <del>1</del> 0)

LD50 oral rat	3010 mg/kg
LD50 dermal rat	> 2000 mg/kg

#### Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

LD50 oral rat	> 5000 mg/kg bodyweight (Rat; ECHA)
LD50 dermal rat	> 2000 mg/kg bodyweight (Rat; ECHA)

Skin corrosion/irritation Causes severe skin burns.

pH: 6,2

Serious eye damage/irritation Causes serious eye damage.

pH: 6,2

Respiratory or skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity Suspected of causing genetic defects.

Carcinogenicity Not classified

Additional information Based on available data, the classification criteria are not met

#### 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)

 IARC group
 3 - Not classifiable

 Reproductive toxicity
 May damage fertility.

 STOT-single exposure
 Not classified

Additional information Based on available data, the classification criteria are not met

STOT-repeated exposure Not classified

Additional information Based on available data, the classification criteria are not met

Aspiration hazard Not classified

Additional information Based on available data, the classification criteria are not met

#### 11.2. Information on other hazards

## 11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine No additional information available

disrupting properties



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#### 11.2.2. Other information

Potential adverse human health effects and

symptoms

No additional information available

## **SECTION 12: Ecological information**

## 12.1. Toxicity

Ecology - water

Toxic to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term

Not classified

Hazardous to the aquatic environment, long-term

(chronic)

Toxic to aquatic life with long lasting effects.

(5.11-5.11-5)		
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)		
LC50 - Fish [1]	1,2 mg/l (96 h; Oncorhynchus mykiss; Lethal)	
LC50 - Fish [2]	2,3 mg/l (96 h; Oncorhynchus mykiss; Nominal concentration)	
EC50 - Crustacea [1]	2 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Nominal concentration)	
EC50 72h - Algae [1]	9,4 mg/l (EPA 660/3 - 75/009, Selenastrum capricornutum, Static system, Fresh water, Experimental value, Biomass)	
Threshold limit - Algae [1]	> 11 mg/l (72 h; Scenedesmus sp.)	
Threshold limit - Algae [2]	4,2 mg/l (72 h; Scenedesmus sp.)	
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 - Crustacea [1]	47 mg/l	
NOEC (acute)	18 mg/l	

### 12.2. Persistence and degradability

HIT-RE 100, A	
Persistence and degradability	May cause long-term adverse effects in the environment.

## 12.3. Bioaccumulative potential

HIT-RE 100, A		
Bioaccumulative potential Not established.		
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)		
Partition coefficient n-octanol/water (Log Pow) ≥ 2,918 (Experimental value; EU Method A.8: Partition Coefficient; 25 °C)		
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500).	

### 12.4. Mobility in soil

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)		
Surface tension	59 mN/m (20 °C, 0.09 g/l)	
Ecology - soil	No (test)data on mobility of the substance available.	



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## 12.5. Results of PBT and vPvB assessment

#### HIT-RE 100, A

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

#### 12.6. Endocrine disrupting properties

No additional information available

#### 12.7. Other adverse effects

Additional information

Avoid release to the environment.

## **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Regional legislation (waste)

Disposal must be done according to official regulations.

Product/Packaging disposal recommendations

After curing, the product can be disposed of with household waste. Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. Packaging contaminated by the product: Dispose in a safe manner in

accordance with local/national regulations.

Ecology - waste materials

European List of Waste (LoW) code

Avoid release to the environment. 08 04 09\* - waste adhesives and sealants containing organic solvents or other dangerous

substances

20 01 27\* - paint, inks, adhesives and resins containing dangerous substances

## **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / RID

ADR	IMDG	IATA	RID
14.1. UN number or ID num	ber		
UN 1759	UN 1759	UN 1759	UN 1759
14.2. UN proper shipping n	ame		
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 descr	iption		
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/ENVIRONME NTALLY 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



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ADR	IMDG	IATA	RID
8	8	8	8
14.4. Packing group			
III	III	Ш	III
14.5. Environmental hazard	ls		
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	n available		1

## 14.6. Special precautions for user

#### **Overland transport**

Classification code (ADR)

Special provisions (ADR)

Limited quantities (ADR)

C10

274

5kg

Packing instructions (ADR) P002, IBC08, LP02, R001

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

Orange plates

80 1759

Tunnel restriction code (ADR)

Transport by sea

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

Air transport

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

Rail transport

Special provisions (RID) 274

Packing instructions (RID) P002, IBC08, LP02, R001

#### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable



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### **SECTION 15: Regulatory information**

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

#### 15.1.1. EU-Regulations

#### **REACH Annex XVII (Restriction List)**

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	
3(b)	2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane; Reaction products of hexane-1,6-diol with 2-(chloromethyl); 1,3 Propanediol, 2 ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane; Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	
3(c)	2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane; Reaction products of hexane-1,6-diol with 2-(chloromethyl); 1,3 Propanediol, 2 ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane; Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	

#### **REACH Annex XIV (Authorisation List)**

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

#### **REACH Candidate List (SVHC)**

Contains no substance(s) listed on the REACH Candidate List

#### PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

#### **POP Regulation (Persistent Organic Pollutants)**

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

#### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

#### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. National regulations

#### **France**

Occupational diseases	
Code	Description
RG 65	Eczematiform lesions of allergic mechanism

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

### **SECTION 16: Other information**



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Indication of changes			
Section	Changed item	Change	Comments
	SDS EU format according to COMMISSION REGULATION (EU) 2020/878	Modified	

Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC50	Median effective concentration	
IARC	International Agency for Research on Cancer	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
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	

Full text of H- and EUH-statements:			
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. 2	Serious eye damage/eye irritation, Category 2		
H314	Causes severe skin burns and eye damage.		



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Full text of H- and EUH-statements:			
H315	Causes skin irritation.		
H317	May cause an allergic skin reaction.		
H318	Causes serious eye damage.		
H319	Causes serious eye irritation.		
H341	Suspected of causing genetic defects.		
H360F	May damage fertility.		
H411	Toxic to aquatic life with long lasting effects.		
H412	Harmful to aquatic life with long lasting effects.		
Muta. 2	Germ cell mutagenicity, Category 2		
Repr. 1B	Reproductive toxicity, Category 1B		
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C		
Skin Irrit. 2	Skin corrosion/irritation, Category 2		
Skin Sens. 1	Skin sensitisation, Category 1		
Skin Sens. 1B	Skin sensitisation, category 1B		

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:				
Skin Corr. 1C	H314	Calculation method		
Eye Dam. 1	H318	Calculation method		
Skin Sens. 1	H317	Calculation method		
Muta. 2	H341	Calculation method		
Repr. 1B	H360F	Expert judgment		
Aquatic Chronic 2	H411	Calculation method		

SDS\_EU\_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.