

Safety information for 2-Component-products

Date of issue: 14/08/2018 Revision date: 14/08/2018 Supersedes: 20/10/2017 Version: 9.2

SECTION 1: Kit identification

1.1 Product identifier

Product name

HIT-RE 500



Product code

BU Anchor

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

喜利得股份有限公司 台北市仁愛路2段2號4樓 10060 台北 - 台湾 T +886 2 2357 9090 0800 221 036 Toll Free - F +886 2 2397 3730 twcs@hilti.com

SECTION 2: General information

Storage

Storage temperature : 5 - 25 $^{\circ}$ 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 the United Nations GHS (Rev. 4, 2011)

Health hazards Skin corrosion/irritation, Category 1A

Serious eye damage/eye irritation, Category 1

Skin sensitisation, Category 1

Reproductive toxicity, Category 1B

Environmental hazards Hazardous to the aquatic environment — Acute Hazard,

Category 2

Hazardous to the aquatic environment — Chronic Hazard,

Category 2

Other hazards not mentioned above are Not applicable or No data is available.

Label elements

14/08/2018 TW - en 1/22



Safety information for 2-Component-products

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

Hazard pictograms (GHS-TW)









Signal word (GHS-TW)

Hazardous ingredients

Hazard statements (GHS-TW)

Danger

Epoxy resin, Amines

H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.

H360F - May damage fertility.

H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (GHS-TW)

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

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

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

P333+P313 - If skin irritation or rash occurs: Get medical

advice/attention.

P337+P313 - If eye irritation persists: Get medical

advice/attention.

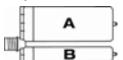
P302+P352 - IF ON SKIN: Wash with plenty of water.

Additional information

2-component-foilpack, contains:

Component A: Epoxy resin, Reactive diluent, inorganic filler

Component B: Amine hardener, inorganic filler



Name	General description	Quantity	Unit	Classification according to the United Nations GHS (Rev. 4, 2011)
HIT-RE 500, A		1	pcs	Skin Corr. 1C, H314 Skin Sens. 1, H317 Repr. 1B, H360 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
HIT-RE 500, B		1	pcs	Skin Corr. 1A, H314 Skin Sens. 1, H317 Aquatic Acute 3, H402 Aquatic Chronic 3, H412

SECTION 4: General advice

General advice For professional users only

SECTION 5: Safe handling advice

General measures Spilled material may present a slipping hazard

Environmental precautions Prevent entry to sewers and public waters

Notify authorities if liquid enters sewers or public waters

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Safety information for 2-Component-products

Avoid release to the environment

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

Technical measures

Comply with applicable regulations

Precautions for safe handling

Wear personal protective equipment

Avoid contact with skin and eyes

Wash hands and other exposed areas with mild soap and water before

eating, drinking or smoking and when leaving work Avoid contact during pregnancy/while nursing

Methods for cleaning up This material and its container must be disposed of in a safe way,

and as per local legislation Mechanically recover the product

On land, sweep or shovel into suitable containers

Store away from other materials.

For containment Collect spillage.

Incompatible materials Sources of ignition
Direct sunlight
Incompatible products Strong bases

Strong acids

SECTION 6: First aid measures

First-aid measures after eye Get immediate medical advice/attention.

contact 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

First-aid measures after

inhalation

Remove person to fresh air and keep comfortable for breathing.

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

contact

Take off immediately all contaminated clothing.

Wash contaminated clothing before reuse.

If skin irritation or rash occurs: Get immediate medical

advice/attention.

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

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

possible)

Symptoms/effects Causes severe skin burns and eye damage.

Symptoms/effects after eye contact

Causes serious eye damage.

Symptoms/effects after inhalation

May cause an allergic skin reaction.

Other medical advice or treatment

Treat symptomatically

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 Thermal decomposition generates :

Carbon dioxide

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Safety information for 2-Component-products

in case of fire

Carbon monoxide

SECTION 8: Other information

No data available

14/08/2018 TW - en 4/22



Safety Data Sheet

According to Taiwan Ministry of Labour Lao-zhi Shou-tzu No. 10302007861, "Regulations for the Labeling and Hazard Communication of Hazardous Chemicals"

Date of issue: 2018/08/14 Revision date:2018/08/14 Supersedes: 2017/10/20 Version: 8.4

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

Product identifier

Product form Mixture
Product name HIT-RE 500, B
Product code BU Anchor

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

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

Details of the supplier of the safety data sheet

Supplier

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SECTION 2: Hazards identification

Classification of the substance or mixture

GHS classification (Taiwan)

Health hazards Skin corrosion/irritation, Category 1A

Serious eye damage/eye irritation, Category 1

Skin sensitisation, Category 1

Environmental hazards Hazardous to the aquatic environment — Acute Hazard, Category 3

Hazardous to the aquatic environment — Chronic Hazard, Category 3

Other hazards not mentioned above are Not applicable or No data is available.

Label elements

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

Hazard pictograms (GHS-TW)



Danger



GHS05

GHS07

Signal word (GHS-TW)

Hazard statements (GHS-TW)

(H314) Causes severe skin burns and eye damage.

(H317) May cause an allergic skin reaction.

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Safety Data Sheet

According to Taiwan Ministry of Labour Lao-zhi Shou-tzu No. 10302007861, "Regulations for the Labeling and Hazard Communication of Hazardous Chemicals"

(H412) Harmful to aquatic life with long lasting effects.

Prevention precautionary statements (P280) Wear eye protection, protective clothing, protective gloves.

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

Response Precautionary Statements (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.

Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

Substances

Not applicable

Mixtures

Name	Product identifier	Concentration
m-Xylylenediamine (間二甲苯二胺)	(CAS-No.) 1477-55-0	35 - 45

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1 First aid measures for different exposure routes

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.

Protection for the first aid staff

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.

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Safety Data Sheet

According to Taiwan Ministry of Labour Lao-zhi Shou-tzu No. 10302007861, "Regulations for the Labeling and Hazard Communication of Hazardous Chemicals"

Protection for the first aid staff

Personal Protection in First Aid and

Measures

Avoid all unnecessary exposure

Notes to physician

Other medical advice or treatment

Treat symptomatically

SECTION 5: Firefighting measures

Extinguishing media

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

Unsuitable extinguishing media Do not use a heavy water stream.

5.2 Specific hazards arising from firefighting measures

5.3 Specific firefighting methods

fighting any chemical fire - Prevent fire fighting water from entering the

environment

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Special protective equipment and precautions for fire-fighters

Protection during firefighting Self-contained breathing apparatus - Do not enter fire area without proper

protective equipment, including respiratory protection

Personal protection (Emergency response) -

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

General measures Spilled material may present a slipping hazard.

For non-emergency personnel

Emergency procedures Evacuate unnecessary personnel.

For emergency responders

protection.

Emergency procedures Ventilate area.

Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

Methods and material for containment and cleaning up

For containment Collect spillage.

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Safety Data Sheet

According to Taiwan Ministry of Labour Lao-zhi Shou-tzu No. 10302007861, "Regulations for the Labeling and Hazard Communication of Hazardous Chemicals"

Methods for cleaning up

This material and its container must be disposed of in a safe way, and as per local

legislation. Mechanically recover the product. On land, sweep or shovel into

suitable containers. Store away from other materials.

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

SECTION 7: Handling and storage

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.

Storage precautionary statements

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 equipment

Personal protective equipment

General:

Personal protective equipment Safety glasses. Gloves. Protective clothing. Avoid all unnecessary exposure.

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.

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

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Safety Data Sheet

According to Taiwan Ministry of Labour Lao-zhi Shou-tzu No. 10302007861, "Regulations for the Labeling and Hazard Communication of Hazardous Chemicals"

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.

SECTION 9Physical and chemical properties

Information on basic physical and chemical properties

Physical state Solid

Appearance Thixotropic paste.

Colour red.

Odour Amine-like.

Odour threshold No data available

pH 11.5

Relative evaporation rate (butylacetate=1) No data available Melting point No data available Freezing point No data available Boiling point No data available Flash point No data available Auto-ignition temperature No data available Decomposition temperature No data available Flammability (solid, gas) Non flammable. Vapour pressure No data available Relative vapour density at 20 ° C No data available Relative density No data available

Density 1.41 g/cm³ DIN EN ISO 1183-3

Solubility insoluble in water.

Log Pow No data available

Viscosity, kinematic No data available

Viscosity, dynamic 50 Pa.s HN-0333

Explosive properties No data available

Oxidising properties No data available

Explosive limits No data available

Other information

No additional information available

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Safety Data Sheet

According to Taiwan Ministry of Labour Lao-zhi Shou-tzu No. 10302007861, "Regulations for the Labeling and Hazard Communication of Hazardous Chemicals"

SECTION 10: Stability and reactivity

Reactivity 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

Likely routes of exposure

No additional information available

Synonyms

Potential adverse human health effects and

Based on available data, the classification criteria are not met

symptoms

Acute toxicity

Acute toxicity (oral)

Acute toxicity (dermal)

Acute toxicity (inhalation)

Not classified

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	> 3100 mg/kg	
LC50 inhalation rat (Dust/Mist - mg/1/4h)	1.34 mg/1/4h	

SECTION 12: Ecological information

Ecotoxicity

Ecology - water Harmful to aquatic life with long lasting effects.

HIT-RE 500, B

Acute aquatic toxicity Harmful to aquatic life.

m-Xylylenediamine (1477-55-0)		
LC50 fish 1	75 mg/l	
LC50 other aquatic organisms 1	20. 3 ppb	
EC50 Daphnia 1	15 mg/1	

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Safety Data Sheet

According to Taiwan Ministry of Labour Lao-zhi Shou-tzu No. 10302007861, "Regulations for the Labeling and Hazard Communication of Hazardous Chemicals"

LOEC (chronic)	15 mg/l
NOEC (acute)	10.5 mg/kg
NOEC (chronic)	4.7 mg/1
NOEC chronic crustacea	4.7 mg/l

Persistence and degradability

HIT-RE 500, B	
Persistence and degradability	May cause long-term adverse effects in the environment.

Bioaccumulative potential

HIT-RE 500, B	
Bioaccumulative potential	Not established.

Mobility in soil

No additional information available

Other adverse effects

Other information Avoid release to the environment.

SECTION 13: Disposal considerations

Waste treatment methods

Ecology - waste materials Avoid release to the environment.

Sewage disposal recommendations -

Product/Packaging disposal recommendations After

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

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	RID
14.1. UN number			
3259	3259	3259	3259
14.2. UN proper shippin	ng 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 desc	ription		
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

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Safety Data Sheet

According to Taiwan Ministry of Labour Lao-zhi Shou-tzu No. 10302007861, "Regulations for the Labeling and Hazard Communication of Hazardous Chemicals"

ADR	IMDG	IATA	RID	
14.3. Transport hazard class(es)				
8	8	8	8	
			8	
14.4. Packing group				
II	II	II	II	
14.5. Environmental hazards				
Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the	
environment : No	environment : No Marine pollutant : No	environment : No	environment : No	
No supplementary information available				

14.6. Special precautions for user

- Overland transport

	3259
Orange plates	80
Mixed packing provisions (ADR)	MP10
Packing instructions (ADR)	P002, IBC08
Limited quantities (ADR)	1kg
Special provisions (ADR)	274
Classification code (ADR)	C8

	3237
Tunnel restriction code (ADR)	E
- 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
Stowage and segregation (IMDG)	Separated from' acids.
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

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Safety Data Sheet

According to Taiwan Ministry of Labour Lao-zhi Shou-tzu No. 10302007861, "Regulations for the Labeling and Hazard Communication of Hazardous Chemicals"

- Rail transport

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

Packing instructions (RID) P002, IBC08

Carriage prohibited (RID) No

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

SECTION 15: Regulatory information

No data available

SECTION 16: Other information

Full text of H-statements:

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects.

SDS prepared by

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Version 8.4

 Date of issue
 2018/08/14

 Revision date
 2018/08/14

 Supersedes
 2017/10/20

Other information None.

SDS_TW_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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Safety Data Sheet

According to Taiwan Ministry of Labour Lao-zhi Shou-tzu No. 10302007861, "Regulations for the Labeling and Hazard Communication of Hazardous Chemicals"

Date of issue: 2018/08/14 Revision date: 2018/08/14 Supersedes: 2017/10/20 Version: 9.2

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

Product identifier

Product form Mixture
Product name HIT-RE 500, A
Product code BU Anchor

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

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

Details of the supplier of the safety data sheet

Supplier

喜利得股份有限公司 台北市仁愛路2段2號4樓 10060 台北 - 台湾 T +886 2 2357 9090

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SECTION 2: Hazards identification

Classification of the substance or mixture

GHS classification (Taiwan)

Health hazards Skin corrosion/irritation, Category 1C

Serious eye damage/eye irritation, Category 1

Skin sensitisation, Category 1 Reproductive toxicity, Category 1B

Environmental hazards Hazardous to the aquatic environment — Acute Hazard, Category 2

Hazardous to the aquatic environment — Chronic Hazard, Category 2

Other hazards not mentioned above are Not applicable or No data is available.

Label elements

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

Hazard pictograms (GHS-TW)



GHS05







HS08

GHS09

Signal word (GHS-TW)

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

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Safety Data Sheet

According to Taiwan Ministry of Labour Lao-zhi Shou-tzu No. 10302007861, "Regulations for the Labeling and Hazard Communication of Hazardous Chemicals"

(H317) May cause an allergic skin reaction.

(H360) May damage fertility..

(H411) Toxic to aquatic life with long lasting effects.

Prevention precautionary statements (P280) Wear eye protection, protective clothing, protective gloves.

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

Response Precautionary Statements (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.

Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

Substances

Not applicable

Mixtures

Name	Product identifier	Concentration
2, 2'-[(1-methylethylidene)bis(4, 1-phenyleneoxymethylene)]bisoxirane (2, 2'-[(1-methylethylidene)bis(4, 1-phenyleneoxymethylene)]bisoxirane)	(CAS-No.) 1675-54-3	25 - 40
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	(CAS-No.) 9003-36-5	10 - 25
Reaction products of hexane-1,6-diol with 2-(chloromethyl)	(CAS-No.) 933999-84-9	10 - 25
1,3 Propanediol, 2 ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane	(CAS-No.) 30499-70-8	5 - 10

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1 First aid measures for different exposure routes

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.

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Safety Data Sheet

According to Taiwan Ministry of Labour Lao-zhi Shou-tzu No. 10302007861, "Regulations for the Labeling and Hazard Communication of Hazardous Chemicals"

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.

Protection for the first aid staff

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.

Protection for the first aid staff

Personal Protection in First Aid and

Measures

Avoid all unnecessary exposure

Notes to physician

SECTION 5: Firefighting measures

Extinguishing media

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

Unsuitable extinguishing media Do not use a heavy water stream.

5.2 Specific hazards arising from firefighting measures

5.3 Specific firefighting methods

fighting any chemical fire - Prevent fire fighting water from entering the $\,$

environment

Special protective equipment and precautions for fire-fighters

Protection during firefighting Self-contained breathing apparatus - Do not enter fire area without proper

protective equipment, including respiratory protection

Personal protection (Emergency response) -

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

General measures Spilled material may present a slipping hazard.

For non-emergency personnel

Emergency procedures Evacuate unnecessary personnel.

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Safety Data Sheet

According to Taiwan Ministry of Labour Lao-zhi Shou-tzu No. 10302007861, "Regulations for the Labeling and Hazard Communication of Hazardous Chemicals"

For emergency responders

Protective equipment Use personal protective equipment as required. Equip cleanup crew with proper

protection.

Emergency procedures Ventilate area.

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.

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.

SECTION 7: Handling and storage

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.

Storage precautionary statements

Storage conditions Protect from sunlight.

Incompatible products Strong bases. Strong acids.

Incompatible materials Sources of ignition. Direct sunlight.

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

SECTION 8: Exposure controls / Personal protection equipment

Personal protective equipment

General:

Personal protective equipment Safety glasses. Gloves. Protective clothing. Avoid all unnecessary exposure.

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According to Taiwan Ministry of Labour Lao-zhi Shou-tzu No. 10302007861, "Regulations for the Labeling and Hazard Communication of Hazardous Chemicals"

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.

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

Relative vapour density at 20 $^{\circ}$ C

Density

Avoid release to the environment.

Consumer exposure controls

Avoid contact during pregnancy/while nursing.

Other information

Do not eat, drink or smoke during use.

SECTION 9Physical and chemical properties

Information on basic physical and chemical properties

Physical state Solid

Appearance Thixotropic paste. Colour Light grey. 0dour characteristic. Odour threshold No data available No data available Relative evaporation rate (butylacetate=1) No data available Melting point No data available Freezing point No data available No data available Boiling point No data available Flash point Auto-ignition temperature No data available Decomposition temperature No data available Flammability (solid, gas) Non flammable. No data available Vapour pressure

Relative density No data available

Solubility insoluble in water.

Log Pow No data available

Viscosity, kinematic No data available

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No data available

1.46 g/ml DIN EN ISO 1183-3



Safety Data Sheet

According to Taiwan Ministry of Labour Lao-zhi Shou-tzu No. 10302007861, "Regulations for the Labeling and Hazard Communication of Hazardous Chemicals"

No data available

Viscosity, dynamic 36 - 53 Pa.s HN-0333

Explosive properties Product is not explosive.

Oxidising properties No data available

Other information

Explosive limits

No additional information available

SECTION 10: Stability and reactivity

Chemical stability Stable under normal conditions
Possibility of hazardous reactions No additional information available

Conditions to avoid Direct sunlight. Extremely high or low temperatures

Incompatible materials Strong acids Strong bases

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should

not be produced

Thermal decomposition generates:

fume

Carbon monoxide Carbon dioxide

SECTION 11: Toxicological information

Likely routes of exposure

No additional information available

Synonyms

Potential adverse human health effects and Base

Based on available data, the classification criteria are not met

symptoms

Acute toxicity

Acute toxicity (oral)

Acute toxicity (dermal)

Acute toxicity (inhalation)

Not classified

Not classified

2, 2'-[(1-methylethylidene)bis(4, 1-phenylene	oxymethylene)]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)
D 111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	111 1 11 0 0

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	2-(chloromethyl) (933999-84-9)
LD50 oral rat	3010 mg/kg
LD50 dermal rat	> 2000 mg/kg

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According to Taiwan Ministry of Labour Lao-zhi Shou-tzu No. 10302007861, "Regulations for the Labeling and Hazard Communication of Hazardous Chemicals"

SECTION 12: Ecological information

Ecotoxicity

Ecology - water

Toxic to aquatic life with long lasting effects.

HIT-RE 500, A

Acute aquatic toxicity

Toxic to aquatic life.

2, 2'-[(1-methylethylidene)bis(4, 1-phenyleneoxymethylene)]bisoxirane (1675-54-3)	
LC50 fish 1	1.2 mg/l (96 h; Oncorhynchus mykiss; Lethal)
EC50 Daphnia 1	1.7 mg/1
LC50 fish 2	2.3 mg/l (96 h; Oncorhynchus mykiss; Nominal concentration)
ErC50 (algae)	> 11 mg/l (EPA 660/3 - 75/009, 72 h, Scenedesmus sp., Static system, Fresh water,
	Experimental value)
Threshold limit algae 1	> 11 mg/l (72 h; Scenedesmus sp.)
Threshold limit algae 2	4.2 mg/1 (72 h; Scenedesmus sp.)

Reaction products of hexane-1,6-diol with	2-(chloromethyl) (933999-84-9)
LC50 fish 1	30 mg/1
LC50 other aquatic organisms 1	23.1 mg/1
EC50 Daphnia 1	47 mg/l
NOEC (acute)	18 mg/l

Persistence and degradability

HIT-RE 500, A		
	Persistence and degradability	May cause long-term adverse effects in the environment.

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	31 (Estimated value, Fresh weight)
Log Pow	>= 2.918 (Experimental value; EU Method A.8: Partition Coefficient; 25 ° C)
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500).

Mobility in soil

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)	
Log Koc	2.65 (log Koc, SRC PCKOCWIN v2.0, QSAR)	
Ecology - soil	Low potential for adsorption in soil.	

Other adverse effects

Other information Avoid release to the environment.

SECTION 13: Disposal considerations

Waste treatment methods

Ecology - waste materials Avoid release to the environment.

Sewage disposal recommendations -

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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

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	RID					
14.1. UN number								
Not regulated	Not regulated	Not regulated	Not regulated					
14.2. UN proper shipping name								
Not regulated	Not regulated	Not regulated	Not regulated					
14.3. Transport hazard class(es)								
Not regulated	Not regulated	Not regulated	Not regulated					
14.4. Packing group	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 \leqslant 5 litres or net mass of solids \leqslant 5 kg)								
not restricted according ADR Special Provision SP375, IATA-DGR Special Provision A197 and IMDG-Code 2.10.2.7								

14.6. Special precautions for user

- Overland transport

Special provisions (ADR) 375

- Transport by sea

No data available

- Air transport

Special provisions (IATA) A197

- Rail transport

Carriage prohibited (RID) No

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

SECTION 15: Regulatory information

No data available

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According to Taiwan Ministry of Labour Lao-zhi Shou-tzu No. 10302007861, "Regulations for the Labeling and Hazard Communication of Hazardous Chemicals"

SECTION 16: Other information

Full text of H-statements:

H303	May be 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.
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.

SDS prepared by

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Version 9.2

Indication of changes:

Section	Changed item	Change	Comments
3	Composition/information on ingredients	Modified	

Other information

 ${\tt SDS_TW_Hilti}$

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

None.

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