

Hilti Crack Injection System CI 060

Safety information for 2-Component-products

Issue date: 25/07/2022

Revision date: 25/07/2022

Supersedes: 08/02/2021

Version: 9.0

SECTION 1: Kit identification

1.1 Product identifier

Product name Hilti Crack Injection System CI 060
Product code BU Fire Protection

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

Hilti (New Zealand) Ltd.
Level 1, Building B 600 South Road
Ellerslie
1051 Auckland - New Zealand
T +64 9 571 9995
, 800 444 584 toll free - F +64 9526 7780
servicenz@hilti.com

SECTION 2: General information

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

SECTION 3:

Classification of the Product

2.1. Classification of the substance or mixture

ECOTV-C	9.3C: Ecotoxicity to terrestrial vertebrates C
ACOR-4	6.1D: Acute Tox. 4 (Oral)
ACDE-4	6.1D: Acute Tox. 4 (Dermal)
SKCO-1A	8.2A: Skin Corr. 1A
EYDA-1	8.3A: Eye Dam. 1
SESK-1	6.5B: Skin Sens. 1
GCMU-2	6.6B: Muta. 2
AEAH-1	9.1A: Aquatic Acute 1
AECH-1	9.1A: Aquatic Chronic 1

2.2. Label elements

Hazard pictograms (GHS NZ)



GHS05



GHS07



GHS08



GHS09

Signal word (GHS NZ)

Danger

Hazard statements (GHS NZ)

H302+H312 - Harmful if swallowed or in contact with skin
H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H341 - Suspected of causing genetic defects.
H410 - Very toxic to aquatic life with long lasting effects.
H433 - Harmful to terrestrial vertebrates

P260 - Do not breathe vapours.
P273 - Avoid release to the environment.
P280 - Wear eye protection, protective clothing, protective gloves.
P302+P352 - IF ON SKIN: Wash with plenty of water/...

Precautionary statements (GHS NZ)

Hilti Crack Injection System CI 060

Safety information for 2-Component-products

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

P308+P313 - IF exposed or concerned: Get medical advice/attention.

2.3. Other hazards not contributing to the classification

No additional information available

Additional information

Name	General description	Quantity	Unit	Classification according to the United Nations GHS
CI 060, A		1	pcs (pieces)	Flam. Liq. Not classified Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Muta. 2, H341 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
CI 060, B		1	pcs (pieces)	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Corr. 1, H314 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

SECTION 4: General advice

No data available

SECTION 5: Safe handling advice

Environmental precautions	Avoid release to the environment
Storage conditions	Store locked up. Store in a well-ventilated place. Keep cool.
Precautions for safe handling	Ensure good ventilation of the work station Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes, on skin, or on clothing. Wear personal protective equipment Avoid breathing vapours.
Methods for cleaning up	Notify authorities if product enters sewers or public waters
For containment	Collect spillage.

SECTION 6: First aid measures

First-aid measures after eye contact	Rinse eyes with water as a precaution
First-aid measures after ingestion	Rinse mouth Call a poison center or a doctor if you feel unwell
First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	Wash skin with plenty of water Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures general	IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell
Symptoms/effects after skin contact	May cause an allergic skin reaction.
Other medical advice or treatment	Treat symptomatically

SECTION 7: Fire fighting measures



Hilti Crack Injection System CI 060

Safety information for 2-Component-products

Protection during firefighting

Do not attempt to take action without suitable protective equipment

Self-contained breathing apparatus

Complete protective clothing

Hazardous decomposition products in case of fire

Toxic fumes may be released

SECTION 8: Other information

No data available

CI 060, B

Safety Data Sheet

according to the Hazardous Substances and New Organisms Act (1996)

Issue date: 25/07/2022

Revision date: 25/07/2022

Supersedes: 08/02/2021

Version: 3.0

SECTION 1: Identification of the hazardous chemical and of the supplier

1.1 Product identifier

Product name CI 060, B
Product form Mixture
Product code BU Fire Protection

1.2 Other means of identification

No additional information available

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

No additional information available

1.4 Supplier's details

Hilti (New Zealand) Ltd.
Level 1, Building B 600 South Road
Ellerslie
1051 Auckland - New Zealand
T +64 9 571 9995
, 800 444 584 toll free - F +64 9526 7780
servicenz@hilti.com

1.5. Emergency phone number

Emergency number Schweizerisches Toxikologisches Informationszentrum – 24h Service
+41 44 251 51 51 (international)
+64 9 571 9995
; 800 444 584 toll free

Country	Organisation/Company	Address	Emergency number
New Zealand	National Poisons Centre		0800 623 000

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

HSNO Approval Number HSR002542

9.3C Ecotoxicity to terrestrial vertebrates C
6.1D Acute toxicity (oral), Category 4
6.1D Acute toxicity (dermal), Category 4
8.2A Skin corrosion/irritation, Category 1A
8.3A Serious eye damage/eye irritation, Category 1
6.5B Skin sensitisation, Category 1
9.1A Hazardous to the aquatic environment – Acute Hazard, Category 1
9.1A Hazardous to the aquatic environment – Chronic Hazard, Category 1

2.2. Label elements

GHS NZ labelling

Hazard pictograms (GHS NZ)



GHS05

GHS07

GHS09

Signal word (GHS NZ)

Danger

Contains

Benzyl alcohol (10 – 30 %)

CI 060, B

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Hazard statements (GHS NZ)	H302+H312 - Harmful if swallowed or in contact with skin H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction. H410 - Very toxic to aquatic life with long lasting effects. H433 - Harmful to terrestrial vertebrates
Prevention	P260 - Do not breathe vapours. P273 - Avoid release to the environment. P280 - Wear eye protection, protective clothing, protective gloves.
Response	P301+P312 - IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. P302+P352 - IF ON SKIN: Wash with plenty of water/... P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards not contributing to the classification

No additional information available

SECTION 3: Composition and information of the ingredients of the hazardous chemical

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	Conc.	Classification according to GHS NZ
polyethylenepolyamines	(CAS-No.) 68131-73-7	70 – 90	6.1D: Acute Tox. 4 (Oral), H302 6.1D: Acute Tox. 4 (Dermal), H312 8.2B: Skin Corr. 1B, H314 6.5B: Skin Sens. 1, H317 9.1A: Aquatic Acute 1, H400 9.1A: Aquatic Chronic 1, H410
Benzyl alcohol	(CAS-No.) 100-51-6	10 – 30	Flam. Liq. Not classified 6.1D: Acute Tox. 4 (Oral), H302 6.1D: Acute Tox. 4 (Inhalation:gas), H332 6.4A: Eye Irrit. 2, H319 9.3C: Ecotoxicity to terrestrial vertebrates C, H433

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	Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Immediately call a POISON CENTER/doctor. Specific measures (see supplemental first aid instruction on this label). Wash with plenty of water/... Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instruction on this label).
First-aid measures after eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
First-aid measures after ingestion	Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER/doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation	May cause an allergic skin reaction.
Symptoms/effects after skin contact	Repeated exposure to this material can result in absorption through skin causing significant health hazard.
Symptoms/effects after eye contact	Causes serious eye damage.

CI 060, B

Safety Data Sheet

according to the Hazardous Substances and New Organisms Act (1996)

Symptoms/effects after ingestion Swallowing a small quantity of this material will result in serious health hazard.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.
EAC code 2X - 2X

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

6.1.1. For non-emergency personnel

Emergency procedures Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment 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.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Avoid breathing dust/fume/gas/mist/vapours/spray.
Hygiene measures Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling. 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 Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.
Incompatible products Strong bases. Strong acids.
Incompatible materials Sources of ignition. Direct sunlight.

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according to the Hazardous Substances and New Organisms Act (1996)

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

Exposure limit values for the other components

No additional information available

8.2. Monitoring

No additional information available

8.3. Appropriate engineering controls

No additional information available

8.4. Individual protection measures, such as personal protective equipment (PPE)

Hand protection	Wear protective gloves.
Eye protection	Chemical goggles or safety glasses
Skin and body protection	Wear suitable protective clothing
Respiratory protection	Wear appropriate mask

Personal protective equipment symbol(s)



SECTION 9: Physical and chemical properties

Physical state	Liquid
Appearance	No data available
Colour	Black
Odour	Amine-like
Odour threshold	No data available
pH	12 Concentration (%): 100; Temperature: 20 °C
Evaporation rate	No data available
Relative evaporation rate (butylacetate=1)	No data available
Melting point / Freezing point	No data available
Boiling point	No data available
Flash point	> 60 °C
Auto-ignition temperature	No data available
Flammability (solid, gas)	Non flammable.
Vapour pressure	No data available
Relative density	No data available
Density	Density : 1.05 kg/l
Solubility	Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	No data available
Viscosity, kinematic	150 – 190 mm ² /s Temperature: 20 °C

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according to the Hazardous Substances and New Organisms Act (1996)

Viscosity, dynamic	110 – 120 Pa·s
Explosive properties	No data available
Explosive limits	No data available
Minimum ignition energy	No data available

SECTION 10: Stability and reactivity

Reactivity	No additional information available
Chemical stability	Not established.
Possibility of hazardous reactions	Not established.
Conditions to avoid	Direct sunlight. Extremely high or low temperatures.
Incompatible materials	Strong acids. Strong bases.
Hazardous decomposition products	fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	Harmful if swallowed.
Acute toxicity (dermal)	Harmful in contact with skin.
Acute toxicity (inhalation)	Not classified

ATE NZ (oral)	656.402 mg/kg bodyweight
ATE NZ (Dermal)	1222.222 mg/kg bodyweight

Benzyl alcohol (100-51-6)	
LD50 oral rat	1620 mg/kg
LC50 Inhalation - Rat	> 4178 mg/m ³

Skin corrosion/irritation	Causes severe skin burns. pH: 12 Concentration (%): 100; Temperature: 20 °C
Serious eye damage/irritation	Causes serious eye damage.
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified

CI 060, B	
Viscosity, kinematic	150 – 190 mm ² /s Temperature: 20 °C
Potential adverse human health effects and symptoms	Harmful if swallowed. Harmful in contact with skin.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water	Very toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	Very toxic to aquatic life with long lasting effects.

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Soil toxicity	Not classified
Terrestrial vertebrate toxicity	Harmful to terrestrial vertebrates.
Terrestrial invertebrate toxicity	Not classified
Other information	Avoid release to the environment.

Benzyl alcohol (100-51-6)	
LD50 oral rat	1620 mg/kg

12.2. Persistence and degradability

CI 060, B	
Persistence and degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

CI 060, B	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

CI 060, B	
Mobility in soil	No additional information available

12.5. Other adverse effects

Ozone	Not classified
Other adverse effects	No additional information available

SECTION 13: Disposal considerations

Product/Packaging disposal recommendations	Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Ecology - waste materials	Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID /

ADR	IMDG	IATA	RID
14.1. UN number			
UN 2735	UN 2735	UN 2735	UN 2735
14.2. UN proper shipping name			
AMINES, LIQUID, CORROSIVE, N.O.S. / POLYAMINES, LIQUID, CORROSIVE, N.O.S. (pentaethylenehexamine)	AMINES, LIQUID, CORROSIVE, N.O.S. (Pentaethylenehexamine)	Amines, liquid, corrosive, n.o.s. (Pentaethylenehexamine)	AMINES, LIQUID, CORROSIVE, N.O.S. (Pentaethylenehexamine)
Transport document description			
UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. / POLYAMINES, LIQUID, CORROSIVE, N.O.S. (pentaethylenehexamine), 8, III, (E)	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (Pentaethylenehexamine), 8, III	UN 2735 Amines, liquid, corrosive, n.o.s. (Pentaethylenehexamine), 8, III	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (Pentaethylenehexamine), 8, III
14.3. Transport hazard class(es)			
8	8	8	8

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Safety Data Sheet

according to the Hazardous Substances and New Organisms Act (1996)

ADR	IMDG	IATA	RID
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
The environmentally hazardous substance mark is not required when transported in quantities of ≤ 5 litres (liquids) or ≤ 5 kg net mass of solids (ADR 5.2.1.8.1; IMDG Code 2.10.2.7; IATA 7.1.5.3).			
No supplementary information available			

14.6. Special precautions for user

Overland transport

Classification code (ADR)	C7
Special provisions (ADR)	274
Limited quantities (ADR)	5I
Packing instructions (ADR)	P001, IBC03, LP01, R001
Mixed packing provisions (ADR)	MP19
Transport category (ADR)	3
Orange plates	

80

2735

Tunnel restriction code (ADR)	E
EAC code	2X

Transport by sea

Special provisions (IMDG)	223, 274
Limited quantities (IMDG)	5 L
Packing instructions (IMDG)	P001, LP01
EmS-No. (Fire)	F-A
EmS-No. (Spillage)	S-B
Stowage category (IMDG)	A
Segregation (IMDG)	SG35
MFAG-No	153

Air transport

PCA packing instructions (IATA)	852
PCA max net quantity (IATA)	5L
CAO packing instructions (IATA)	856
Special provisions (IATA)	A3

Rail transport

Special provisions (RID)	274
Limited quantities (RID)	5L
Packing instructions (RID)	P001, IBC03, LP01, R001

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

Not applicable

CI 060, B

Safety Data Sheet

according to the Hazardous Substances and New Organisms Act (1996)

14.8. Hazchem or Emergency Action Code

EAC code 2X.

SECTION 15: Regulatory information

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

Hazardous Substances and New Organisms Act

HSNO Approval Number HSR002542

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Issue date 25/07/2022
 Revision date 25/07/2022
 Supersedes 08/02/20210

Indication of changes:

Section	Changed item	Change	Comments
9	Flash point	Added	
9	Odour	Modified	
9	Viscosity, kinematic	Added	
9	Solubility	Added	
9	pH	Modified	
14	Transportation information	Modified	

Other information None.

Full text of H-statements:

6.1D: Acute Tox. 4 (Dermal)	6.1D: Acute toxicity (dermal), Category 4
6.1D: Acute Tox. 4 (Inhalation:gas)	6.1D: Acute toxicity (inhalation:gas) Category 4
6.1D: Acute Tox. 4 (Oral)	6.1D: Acute toxicity (oral), Category 4
6.4A: Eye Irrit. 2	6.4A: Serious eye damage/eye irritation, Category 2
6.5B: Skin Sens. 1	6.5B: Skin sensitisation, Category 1
8.2A: Skin Corr. 1A	8.2A: Skin corrosion/irritation, Category 1A
8.2B: Skin Corr. 1B	8.2B: Skin corrosion/irritation, Category 1B
8.3A: Eye Dam. 1	8.3A: Serious eye damage/eye irritation, Category 1
9.1A: Aquatic Acute 1	9.1A: Hazardous to the aquatic environment – Acute Hazard, Category 1
9.1A: Aquatic Chronic 1	9.1A: Hazardous to the aquatic environment – Chronic Hazard, Category 1
9.3C: Ecotoxicity to terrestrial vertebrates C	9.3C: Ecotoxicity to terrestrial vertebrates C
Flam. Liq. Not classified	Flammable liquids Not classified
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.

CI 060, B

Safety Data Sheet

according to the Hazardous Substances and New Organisms Act (1996)

H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H433	Harmful to terrestrial vertebrates

SDS_NZ_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.

CI 060, A

Safety Data Sheet

according to the Hazardous Substances and New Organisms Act (1996)

Issue date: 25/07/2022

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Supersedes: 08/02/2021

Version: 3.0

SECTION 1: Identification of the hazardous chemical and of the supplier

1.1 Product identifier

Product name CI 060, A
Product form Mixture
Product code BU Fire Protection

1.2 Other means of identification

No additional information available

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

No additional information available

1.4 Supplier's details

Hilti (New Zealand) Ltd.
Level 1, Building B 600 South Road
Ellerslie
1051 Auckland - New Zealand
T +64 9 571 9995
, 800 444 584 toll free - F +64 9526 7780
servicenz@hilti.com

1.5. Emergency phone number

Emergency number Schweizerisches Toxikologisches Informationszentrum – 24h Service
+41 44 251 51 51 (international)
+64 9 571 9995
; 800 444 584 toll free

Country	Organisation/Company	Address	Emergency number
New Zealand	National Poisons Centre		0800 623 000

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

HSNO Approval Number HSR002544

6.3A Flammable liquids Not classified
6.4A Skin corrosion/irritation, Category 2
6.5B Serious eye damage/eye irritation, Category 2A
6.5B Skin sensitisation, Category 1
6.6B Germ cell mutagenicity, Category 2
9.1D Hazardous to the aquatic environment – Acute Hazard, Category 2
9.1B Hazardous to the aquatic environment – Chronic Hazard, Category 2

2.2. Label elements

GHS NZ labelling

Hazard pictograms (GHS NZ)



GHS07

GHS08

GHS09

Signal word (GHS NZ)

Warning

Contains

bis-[4-(2,3-epoxypropoxy)phenyl]propane (70 – 90 %); 2,3-epoxypropyl o-tolyl ether (25 – 30 %)

CI 060, A

Safety Data Sheet

according to the Hazardous Substances and New Organisms Act (1996)

Hazard statements (GHS NZ)	H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H341 - Suspected of causing genetic defects. H401 - Toxic to aquatic life H411 - Toxic to aquatic life with long lasting effects.
Prevention	P273 - Avoid release to the environment. P280 - Wear eye protection, protective clothing, protective gloves.
Response	P302+P352 - IF ON SKIN: Wash with plenty of water/... P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313 - IF exposed or concerned: Get medical advice/attention. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

2.3. Other hazards not contributing to the classification

No additional information available

SECTION 3: Composition and information of the ingredients of the hazardous chemical

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	Conc.	Classification according to GHS NZ
bis-[4-(2,3-epoxypropoxy)phenyl]propane	(CAS-No.) 1675-54-3	70 – 90	3.1D: Flam. Liq. 4, H227 Acute Tox. Not classified (Oral) 6.3A: Skin Irrit. 2, H315 6.4A: Eye Irrit. 2A, H319 6.5B: Skin Sens. 1, H317 9.1D: Aquatic Acute 2, H401 9.1B: Aquatic Chronic 2, H411
2,3-epoxypropyl o-tolyl ether	(CAS-No.) 2210-79-9	25 – 30	Flam. Liq. Not classified Acute Tox. Not classified (Oral) Acute Tox. Not classified (Inhalation:dust,mist) 6.3A: Skin Irrit. 2, H315 6.5B: Skin Sens. 1, H317 6.6B: Muta. 2, H341 9.1B: Aquatic Chronic 2, H411

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. If you feel unwell, seek medical advice. Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	Rinse mouth. Do not induce vomiting. Call a physician immediately. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

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

CI 060, A

Safety Data Sheet

according to the Hazardous Substances and New Organisms Act (1996)

Symptoms/effects after eye contact	Serious damage to eyes. Causes serious eye irritation.
Symptoms/effects after ingestion	Burns.

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

Other medical advice or treatment	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire	Toxic fumes may be released.
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5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. Do not enter fire area without proper protective equipment, including respiratory protection.
EAC code	•3Z - •3Z

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

6.1.1. For non-emergency personnel

Emergency procedures	Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe vapours. Evacuate unnecessary personnel.
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6.1.2. For emergency responders

Protective equipment	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". Equip cleanup crew with proper protection.
Emergency procedures	Ventilate area.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

For containment	Collect spillage.
Methods for cleaning up	Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes. Do not breathe vapours. Wear personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Avoid breathing dust/fume/gas/mist/vapours/spray. Use personal protective equipment as required.

Hygiene measures

Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

Store locked up. Store in a well-ventilated place. Keep cool. Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.

Incompatible products

Strong bases. Strong acids.

Incompatible materials

Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

Exposure limit values for the other components

No additional information available

8.2. Monitoring

No additional information available

8.3. Appropriate engineering controls

Appropriate engineering controls

Ensure good ventilation of the work station.

8.4. Individual protection measures, such as personal protective equipment (PPE)

Hand protection

Wear protective gloves.

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves	Butyl rubber, Fluoroelastomer (FKM), Polyvinylalcohol (PVA)	3 (> 60 minutes)			EN ISO 374

Eye protection

Chemical goggles or safety glasses

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

Skin and body protection

Wear suitable protective clothing

Respiratory protection

[In case of inadequate ventilation] wear respiratory protection. Wear appropriate mask

Personal protective equipment symbol(s)

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Environmental exposure controls

Avoid release to the environment.

SECTION 9: Physical and chemical properties

Physical state	Liquid
Appearance	No data available
Colour	yellowish
Odour	mild
Odour threshold	No data available
pH	No data available
Evaporation rate	No data available
Relative evaporation rate (butylacetate=1)	No data available
Melting point / Freezing point	Melting point : Not applicable
Boiling point	> 200 °C
Flash point	138 °C
Auto-ignition temperature	No data available
Decomposition temperature	> 200 °C
Flammability (solid, gas)	Not applicable, Non flammable.
Vapour pressure	Vapour pressure : 0.01 hPa
Relative density	No data available
Density	Density : 1.15 kg/l
Solubility	insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	No data available
Viscosity, kinematic	400 – 570 mm ² /s
Viscosity, dynamic	No data available
Explosive properties	No data available
Explosive limits	No data available
Minimum ignition energy	No data available

SECTION 10: Stability and reactivity

Reactivity	The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable under normal conditions. Not established.
Possibility of hazardous reactions	No dangerous reactions known under normal conditions of use. Not established.
Conditions to avoid	Heat. Direct sunlight. Extremely high or low temperatures.
Incompatible materials	Strong acids. Strong bases. Oxidizing agent.
Hazardous decomposition products	fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

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2,3-epoxypropyl o-tolyl ether (2210-79-9)	
LD50 oral rat	> 5000 mg/kg (Rat, Oral)
LD50 dermal rat	> 2000 mg/kg (Rat, Dermal)
LC50 Inhalation - Rat	6.09 mg/l (4 h, Rat, Inhalation)

bis-[4-(2,3-epoxypropoxy)phenyl]propane (1675-54-3)	
LD50 oral rat	> 19800 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)

Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	Suspected of causing genetic defects.
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified

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Viscosity, kinematic	400 – 570 mm ² /s
Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

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

2,3-epoxypropyl o-tolyl ether (2210-79-9)	
LC50 - Fish [1]	1 – 10 mg/l (Pisces)
EC50 - Crustacea [1]	1 – 10 mg/l (Invertebrata)
Partition coefficient n-octanol/water (Log Pow)	2.16 (Estimated value)
	> 2000 mg/kg (Rat, Dermal)
LD50 oral rat	> 5000 mg/kg (Rat, Oral)

bis-[4-(2,3-epoxypropoxy)phenyl]propane (1675-54-3)	
LC50 - Fish [1]	1.75 mg/l LC50 96h fish - Oncorhynchus mykiss (Rainbow trout)
EC50 - Crustacea [1]	2.8 mg/l EC50 48h - Daphnia magna
EC50 72h - Algae [1]	9.4 mg/l (EPA 660/3 - 75/009, Selenastrum capricornutum, Static system, Fresh water, Experimental value, Biomass)
Partition coefficient n-octanol/water (Log Pow)	≥ 2.918 (Experimental value; EU Method A.8: Partition Coefficient; 25 °C)
	> 2000 mg/kg (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)
LD50 oral rat	> 19800 mg/kg (Rat; OECD 420: Acute Oral toxicity – Acute Toxic Class Method; Experimental value)
Threshold limit - Algae [1]	> 11 mg/l (72 h; Scenedesmus sp.)

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bis-[4-(2,3-epoxypropoxy)phenyl]propane (1675-54-3)	
Threshold limit - Algae [2]	4.2 mg/l (72 h; Scenedesmus sp.)

12.2. Persistence and degradability

CI 060, A	
Persistence and degradability	May cause long-term adverse effects in the environment.

2,3-epoxypropyl o-tolyl ether (2210-79-9)	
Persistence and degradability	Biodegradability in soil: no data available. Not readily biodegradable in water.

bis-[4-(2,3-epoxypropoxy)phenyl]propane (1675-54-3)	
Not rapidly degradable	
Persistence and degradability	Biodegradability in water: no data available.

12.3. Bioaccumulative potential

CI 060, A	
Bioaccumulative potential	Not established.

2,3-epoxypropyl o-tolyl ether (2210-79-9)	
Partition coefficient n-octanol/water (Log Pow)	2.16 (Estimated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

bis-[4-(2,3-epoxypropoxy)phenyl]propane (1675-54-3)	
Partition coefficient n-octanol/water (Log Pow)	≥ 2.918 (Experimental value; EU Method A.8: Partition Coefficient; 25 °C)
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

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Mobility in soil	No additional information available

2,3-epoxypropyl o-tolyl ether (2210-79-9)	
Partition coefficient n-octanol/water (Log Pow)	2.16 (Estimated value)

bis-[4-(2,3-epoxypropoxy)phenyl]propane (1675-54-3)	
Surface tension	59 mN/m (20 °C, 0.09 g/l)
Partition coefficient n-octanol/water (Log Pow)	≥ 2.918 (Experimental value; EU Method A.8: Partition Coefficient; 25 °C)
Ecology - soil	No (test)data on mobility of the substance available.

12.5. Other adverse effects

Ozone	Not classified
Other adverse effects	No additional information available

SECTION 13: Disposal considerations

Waste treatment methods	Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Ecology - waste materials	Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID /

ADR	IMDG	IATA	RID
Special provision(s) applied : 375	Special provision(s) applied : 969	Special provision(s) applied : A197	Special provision(s) applied : 375
These substances when carried in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to any other provisions of ADR provided the			

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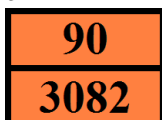
according to the Hazardous Substances and New Organisms Act (1996)

ADR	IMDG	IATA	RID
packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.			
14.1. UN number			
UN 3082	UN 3082	UN 3082	UN 3082
14.2. UN proper shipping name			
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3-epoxypropoxy)phenyl]propane ; 2,3-epoxypropyl o-tolyl ether)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3-epoxypropoxy)phenyl]propane ; 2,3-epoxypropyl o-tolyl ether)	Environmentally hazardous substance, liquid, n.o.s. (bis-[4-(2,3-epoxypropoxy)phenyl]propane ; 2,3-epoxypropyl o-tolyl ether)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3-epoxypropoxy)phenyl]propane ; 2,3-epoxypropyl o-tolyl ether)
Transport document description			
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3-epoxypropoxy)phenyl]propane ; 2,3-epoxypropyl o-tolyl ether), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3-epoxypropoxy)phenyl]propane ; 2,3-epoxypropyl o-tolyl ether), 9, III	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (bis-[4-(2,3-epoxypropoxy)phenyl]propane ; 2,3-epoxypropyl o-tolyl ether), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3-epoxypropoxy)phenyl]propane ; 2,3-epoxypropyl o-tolyl ether), 9, III
14.3. Transport hazard class(es)			
9	9	9	9
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
Environmentally hazardous substances derogation applies (quantity of liquids ≤ 5 litres or net mass of solids ≤ 5 kg). The environmentally hazardous substance mark is therefore not required according to ADR Special Provision 375, IATA-DGR A197 and IMDG-Code 2.10.2.7.			
No supplementary information available			

14.6. Special precautions for user

Overland transport

Classification code (ADR)	M6
Special provisions (ADR)	274, 335, 375, 601
Limited quantities (ADR)	5I
Packing instructions (ADR)	P001, IBC03, LP01, R001
Mixed packing provisions (ADR)	MP19
Transport category (ADR)	3
Orange plates	



Tunnel restriction code (ADR)	-
EAC code	•3Z

Transport by sea

Special provisions (IMDG)	274, 335, 969
Limited quantities (IMDG)	5 L
Packing instructions (IMDG)	LP01, P001
EmS-No. (Fire)	F-A
EmS-No. (Spillage)	S-F
Stowage category (IMDG)	A

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Air transport

PCA packing instructions (IATA)	964
PCA max net quantity (IATA)	450L
CAO packing instructions (IATA)	964
Special provisions (IATA)	A97, A158, A197, A215

Rail transport

Special provisions (RID)	274, 335, 375, 601
Limited quantities (RID)	5L
Packing instructions (RID)	P001, IBC03, LP01, R001

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

Not applicable

14.8. Hazchem or Emergency Action Code

EAC code •3Z.

SECTION 15: Regulatory information

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

Hazardous Substances and New Organisms Act

HSNO Approval Number HSR002544

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Issue date	25/07/2022
Revision date	25/07/2022
Supersedes	08/02/20210

Indication of changes:

Section	Changed item	Change	Comments
3	Composition/information on ingredients	Modified	CAS-No. Change
9	Solubility	Added	
9	Boiling point	Added	
9	Viscosity, kinematic	Added	
9	Vapour pressure	Modified	
9	Colour	Modified	
14	Transportation information	Added	

Other information

None.

Full text of H-statements:

3.1D: Flam. Liq. 4	3.1D: Flammable liquids, Category 4
6.3A: Skin Irrit. 2	6.3A: Skin corrosion/irritation, Category 2
6.4A: Eye Irrit. 2A	6.4A: Serious eye damage/eye irritation, Category 2A
6.5B: Skin Sens. 1	6.5B: Skin sensitisation, Category 1
6.6B: Muta. 2	6.6B: Germ cell mutagenicity, Category 2

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9.1B: Aquatic Chronic 2	9.1B: Hazardous to the aquatic environment – Chronic Hazard, Category 2
9.1D: Aquatic Acute 2	9.1D: Hazardous to the aquatic environment – Acute Hazard, Category 2
Acute Tox. Not classified (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Not classified
Acute Tox. Not classified (Oral)	Acute toxicity (oral) Not classified
Flam. Liq. Not classified	Flammable liquids Not classified
H227	Combustible liquid
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H341	Suspected of causing genetic defects.
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects.

SDS_NZ_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.