

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 (Canada) Corp.
2360 Meadowpine Boulevard
L5N 6S2 Mississauga, Ontario - Canada
T +1905 8139200
1-800-363-4458 toll free - F +1 905 813 9009

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: Kit contents

Classification of the Product

Classification (GHS CA)

Acute toxicity (oral), Category 4	H302
Acute toxicity (dermal), Category 4	H312
Skin corrosion/irritation, Category 1	H314
Skin sensitisation, Category 1	H317
Germ cell mutagenicity, Category 2	H341
Hazardous to the aquatic environment – Acute Hazard, Category 1	H400
Hazardous to the aquatic environment – Chronic Hazard, Category 1	H410

Label elements

GHS CA labelling

Hazard pictograms (GHS CA)



Signal word (GHS CA)

Danger

Hazard statements (GHS CA)

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.
H400 - Very toxic to aquatic life.
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (GHS CA)

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.
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.

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Safety information for 2-Component-products

Additional information

Name	General description	Quantity	Unit	Classification (GHS CA)
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
CI 060, A		1	pcs (pieces)	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Muta. 2, H341 Aquatic Chronic 2, H411

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

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



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SECTION 8: Other information

No data available

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Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Issue date: 07/25/2022

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Version: 9.0

SECTION 1: Identification

1.1. Product identifier

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

1.2. Recommended use and restrictions on use

1.3. Supplier

Supplier

Hilti (Canada) Corp.
2360 Meadowpine Boulevard
L5N 6S2 Mississauga, Ontario - Canada
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1-800-363-4458 toll free - F +1 905 813 9009

Department issuing data specification sheet

Hilti AG
Feldkircherstraße 100
9494 Schaan - Liechtenstein
T +423 234 2111
chemicals.hse@hilti.com

1.4. Emergency telephone number

Emergency number	Chem-Trec
	Tel.: 1 800 424 9300 (USA, PR, Virgin Islands, Canada)
	Tel.: 703 527 3887 (Other countries)

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Skin corrosion/irritation, Category 2	H315	Causes skin irritation.
Serious eye damage/eye irritation, Category 2A	H319	Causes serious eye irritation.
Skin sensitisation, Category 1	H317	May cause an allergic skin reaction.
Germ cell mutagenicity, Category 2	H341	Suspected of causing genetic defects.
Hazardous to the aquatic environment – Chronic Hazard, Category 2	H411	Toxic to aquatic life with long lasting effects.
Full text of H-statements: see section 16		

2.2. GHS Label elements, including precautionary statements

GHS CA labelling

Hazard pictograms (GHS CA)



Signal word (GHS CA)

Warning

Hazard statements (GHS CA)

H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H341 - Suspected of causing genetic defects.
H411 - Toxic to aquatic life with long lasting effects.
P273 - Avoid release to the environment.
P280 - Wear eye protection, protective clothing, protective gloves.
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.

Precautionary statements (GHS CA)



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2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS CA)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

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Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
bis-[4-(2,3-epoxypropoxy)phenyl]propane	2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane / 2,2-bis(4-(2,3-epoxypropyloxy)phenyl)propane / 2,2-bis(4-glycidyloxyphenyl)propane / 2,2-bis-(4-hydroxyphenyl)propan bis(2,3-epoxypropyl)ether / 2,2-bis(4-hydroxyphenyl)propane diglycidyl ether / 2,2-bis(para-(2,3-epoxypropoxy)phenyl)propane / 2,2-bis(para-(2,3-glycidyloxy)phenyl)propane / 2,2-bis(para-glycidyloxyphenyl)propane / 2,2-bis(para-hydroxyphenyl)propane, diglycidyl ether / 2,2-bis(p-glycidyloxyphenyl)propane / 2,2-bis(p-hydroxyphenyl)propane, diglycidyl ether / 2,2-bis[4-(2,3-epoxypropoxy)phenyl]propane / 2,2-bis-[4(2,3-epoxypropyloxyphenyl)]propane / 4,4'-bis(2,3-epoxypropoxy)diphenylmethane / 4,4'-dihydroxydiphenyldimethylmethane diglycidyl ether / 4,4'-isopropylidene-bis(1-(2,3-epoxypropoxy)benzene) / 4,4'-isopropylidenediphenol diglycidyl ether / 4,4'-isopropylidenediphenol epichlorohydrin resin / araldite 6005 / BADGE / bis(4-glycidyloxyphenyl)dimethylmethane / bis(4-hydroxyphenyl)dimethylmethane diglycidyl ether / bis[4-(2,3-epoxypropoxy)phenyl]propane / bisphenol A diglycidyl ether / bisphenol A epichlorohydrin condensate / BPDGE / DER332 / dian diglycidyl ether / dian-bis(glycidyl ether) / diglycidyl bisphenol A / diglycidyl bisphenol A ether / diglycidyl diphenylolpropane ether / diglycidyl ether of 2,2-bis(4-hydroxyphenyl)propane / diglycidyl ether of 2,2-bis(para-hydroxyphenyl)propane / diglycidyl ether of 4,4'-isopropylidenediphenol / diglycidyl ether of bisphenol A / diomethane diglycidyl ether / epi-rez 508 / epi-rez 510 / epotuf 37-140 / epoxide A / ERL-2774 / GY 6010 / oligomer 340 / oxirane, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis- / p,p'-dihydroxydiphenyldimethylmethane diglycidyl ether / para,para'-dihydroxydiphenyldimethylmethane diglycidyl ether / propane, 2,2-bis(p-(2,3-epoxypropoxy)phenyl)-	(CAS-No.) 1675-54-3	70 – 90	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317
2,3-epoxypropyl o-tolyl ether	2,3-epoxypropyl o-tolyl ether [(2-methylphenoxy)methyl] oxirane / 1,2-epoxy-3-(ortho-tolyloxy)propane / 1,2-epoxy-3-(o-tolyloxy)propane / 2,3-epoxypropyl o-tolyl ether / 2,3-epoxypropyl-ortho-tolyl ether / 2-[(2-methylphenoxy)methyl]oxirane / 2-methylphenyl glycidyl ether / ARALDITE DY 023 / glycidyl 2-methylphenyl ether / glycidyl o-methylphenyl ether / glycidyl ortho-methylphenyl ether / glycidyl ortho-tolyl ether / glycidyl o-tolyl ether / o-cresyl glycidyl ether / ortho-cresyl glycidyl ether / oxirane, [(2-methylphenoxy)methyl]-	(CAS-No.) 2210-79-9	25 – 30	Muta. 2, H341 Skin Irrit. 2, H315 Skin Sens. 1, H317

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Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

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.
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).

4.2. Most important symptoms and effects (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.
Symptoms/effects after eye contact	Serious damage to eyes. Causes serious eye irritation.
Symptoms/effects after ingestion	Burns.
Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.

4.3. Immediate medical attention and special treatment, if necessary

Other medical advice or treatment	Treat symptomatically.
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SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

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

Unsuitable extinguishing media	Do not use a heavy water stream.
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5.3. Specific hazards arising from the hazardous product

Hazardous decomposition products in case of fire	Toxic fumes may be released.
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5.4. 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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

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

6.3. Reference to other sections

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

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

8.2. Appropriate engineering controls

Appropriate engineering controls	Ensure good ventilation of the work station.
Environmental exposure controls	Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Gloves. Protective clothing. Protective goggles. Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves.

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

Eye protection:

Chemical goggles or safety glasses

Type	Field of application	Characteristics
Safety glasses		

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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):



Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	No data available
Colour	yellowish
Odour	mild
Odour threshold	No data available
pH	No data available
Relative evaporation rate (butylacetate=1)	No data available
Relative evaporation rate (ether=1)	No data available
Melting point	Not applicable
Freezing point	No data available
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	0.01 hPa
Vapour pressure at 50 °C	No data available
Relative density	No data available
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
Explosive limits	No data available

9.2. Other information

No additional information 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.

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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.
Hardening time:	No additional information available

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

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 sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	Suspected of causing genetic defects.
Carcinogenicity	Not classified

Reproductive toxicity	Not classified
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STOT-single exposure	Not classified
STOT-repeated exposure	Not classified

Aspiration hazard	Not classified
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Viscosity, kinematic	400 – 570 mm²/s

Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.
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.
Symptoms/effects after eye contact	Serious damage to eyes. Causes serious eye irritation.
Symptoms/effects after ingestion	Burns.

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)	Not classified

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

Toxic to aquatic life with long lasting effects.

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)

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)
Threshold limit - Algae [1]	> 11 mg/l (72 h; Scenedesmus sp.)
Threshold limit - Algae [2]	4.2 mg/l (72 h; Scenedesmus sp.)

12.2. Persistence and degradability

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)	
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)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Partition coefficient n-octanol/water (Log Pow)	2.16 (Estimated value)
bis-[4-(2,3-epoxypropoxy)phenyl]propane (1675-54-3)	
Bioaccumulative potential	Not bioaccumulative.
Partition coefficient n-octanol/water (Log Pow)	≥ 2.918 (Experimental value; EU Method A.8: Partition Coefficient; 25 °C)

12.4. Mobility in soil

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)
Ecology - soil	No (test) data on mobility of the substance available.
Partition coefficient n-octanol/water (Log Pow)	≥ 2.918 (Experimental value; EU Method A.8: Partition Coefficient; 25 °C)

12.5. Other adverse effects

Ozone	Not classified
Other information	Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	Dispose of contents/container in accordance with licensed collector's sorting instructions.
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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 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 or ID 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)

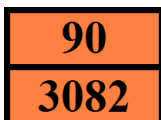
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Packing instructions (ADR) P001, IBC03, LP01, R001
 Mixed packing provisions (ADR) MP19
 Transport category (ADR) 3
 Orange plates



Tunnel restriction code (ADR) -

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

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. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. National regulations

2,3-epoxypropyl o-tolyl ether (2210-79-9)
Listed on the Canadian DSL (Domestic Substances List)
bis-[4-(2,3-epoxypropoxy)phenyl]propane (1675-54-3)
Listed on the Canadian DSL (Domestic Substances List)

SECTION 16: Other information

SDS Major/Minor None
 Issue date 07-25-2022
 Revision date 07-25-2022
 Supersedes 02-08-2021

Indication of changes:

Section	Changed item	Change	Comments
2.1	Hazard statements (GHS CA)	Modified	
3	Composition/information on ingredients	Modified	CAS-No. Change
9.1	Solubility	Added	
9.1	Boiling point	Added	
9.1	Viscosity, kinematic	Added	



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9.1	Vapour pressure	Modified	
9.1	Colour	Modified	
14	Transport information	Added	

Data sources

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information

None.

Full text of H-statements:

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H341	Suspected of causing genetic defects.
H411	Toxic to aquatic life with long lasting effects.

SDS_CA_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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according to the Hazardous Products Regulation (February 11, 2015)

Issue date: 07/25/2022

Revision date: 07/25/2022

Supersedes: 02/08/2021

Version: 9.0

SECTION 1: Identification

1.1. Product identifier

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

1.2. Recommended use and restrictions on use

1.3. Supplier

Supplier

Hilti (Canada) Corp.
2360 Meadowpine Boulevard
L5N 6S2 Mississauga, Ontario - Canada
T +1905 8139200
1-800-363-4458 toll free - F +1 905 813 9009

Department issuing data specification sheet

Hilti AG
Feldkircherstraße 100
9494 Schaan - Liechtenstein
T +423 234 2111
chemicals.hse@hilti.com

1.4. Emergency telephone number

Emergency number	Chem-Trec Tel.: 1 800 424 9300 (USA, PR, Virgin Islands, Canada) Tel.: 703 527 3887 (Other countries)
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SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Acute toxicity (oral), Category 4	H302	Harmful if swallowed.
Acute toxicity (dermal), Category 4	H312	Harmful in contact with skin.
Skin corrosion/irritation, Category 1	H314	Causes severe skin burns and eye damage.
Skin sensitisation, Category 1	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment – Acute Hazard, Category 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment – Chronic Hazard, Category 1	H410	Very toxic to aquatic life with long lasting effects.

Full text of H-statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS CA labelling

Hazard pictograms (GHS CA)



Signal word (GHS CA)

Danger

Hazard statements (GHS CA)

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.
H400 - Very toxic to aquatic life.
H410 - Very toxic to aquatic life with long lasting effects.

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Precautionary statements (GHS CA)

P260 - Do not breathe vapours.
P273 - Avoid release to the environment.
P280 - Wear eye protection, protective clothing, protective gloves.
P301+P312 - IF SWALLOWED: Call a doctor, a POISON CENTER 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

No additional information available

2.4. Unknown acute toxicity (GHS CA)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
polyethylenepolyamines	amines, polyethylenepoly / amines, polyethylenepoly- / crude polyamine bottoms / HEPA / imines, poly-, polyethylene / polyamines (polymeric), polyethylene- / polyamines, polyethylene- / polyimines, polyethylene-	(CAS-No.) 68131-73-7	70 – 90	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Benzyl alcohol	benzyl alcohol	(CAS-No.) 100-51-6	10 – 30	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

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.
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).

4.2. Most important symptoms and effects (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.
Symptoms/effects after ingestion	Swallowing a small quantity of this material will result in serious health hazard.
Potential adverse human health effects and symptoms	Harmful if swallowed. Harmful in contact with skin.

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4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

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

5.2. Unsuitable extinguishing media

Unsuitable extinguishing media Do not use a heavy water stream.

5.3. Specific hazards arising from the hazardous product

5.4. 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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

6.2. Methods and materials 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.

6.3. Reference to other sections

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

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.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

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8.2. Appropriate engineering controls

No additional information available

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Gloves. Protective clothing. Protective goggles. Avoid all unnecessary exposure.

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):



Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic 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
Relative evaporation rate (butylacetate=1)	No data available
Relative evaporation rate (ether=1)	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	> 60 °C
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	Non flammable.
Vapour pressure	No data available
Vapour pressure at 50 °C	No data available
Relative density	No data available
Density	1.05 kg/l
Solubility	Soluble in water.

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Partition coefficient n-octanol/water (Log Pow)	No data available
Viscosity, kinematic	150 – 190 mm ² /s Temperature: 20 °C
Viscosity, dynamic	110 – 120 Pa·s
Explosive limits	No data available

9.2. Other information

No additional information 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.
Hardening time:	No additional information available

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 CA (oral)	500 mg/kg bodyweight
ATE CA (Dermal)	1222.222 mg/kg bodyweight

Benzyl alcohol (100-51-6)	
LD50 oral rat	1620 mg/kg
LC50 Inhalation - Rat	> 4178 mg/m ³
ATE CA (oral)	500 mg/kg bodyweight

polyethylenepolyamines (68131-73-7)	
ATE CA (oral)	500 mg/kg bodyweight
ATE CA (Dermal)	1100 mg/kg bodyweight

Skin corrosion/irritation	Causes severe skin burns. pH: 12 Concentration (%): 100; Temperature: 20 °C
Serious eye damage/irritation	Assumed to cause serious eye damage pH: 12 Concentration (%): 100; Temperature: 20 °C
Respiratory or skin sensitization	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

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

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.

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

No additional information available

12.5. Other adverse effects

Ozone	Not classified
Other information	Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

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 /

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ADR	IMDG	IATA	RID
14.1. UN number or ID 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
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	

Tunnel restriction code (ADR)	E
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Transport by sea

Special provisions (IMDG)	223, 274
Limited quantities (IMDG)	5 L
Packing instructions (IMDG)	P001, LP01
EmS-No. (Fire)	F-A

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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. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. National regulations

Benzyl alcohol (100-51-6)
Listed on the Canadian DSL (Domestic Substances List)
polyethylenepolyamines (68131-73-7)
Listed on the Canadian DSL (Domestic Substances List)

SECTION 16: Other information

SDS Major/Minor	None
Issue date	07-25-2022
Revision date	07-25-2022
Supersedes	02-08-2021

Indication of changes:

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

Data sources REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information None.

Full text of H-statements:

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.



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H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

SDS_CA_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.