

HIT-ICE

Safety information for 2-Component-products

Date of issue: 31/01/2020

Revision date: 31/01/2020

Supersedes: 07/11/2016

Version: 7.0

SECTION 1: Kit identification

1.1 Product identifier

Product name

HIT-ICE



Product code

BU Anchor

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

Storage

Storage temperature : 5 - 25 °C

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

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

SECTION 3: Kit contents

Classification of the Product

Classification (GHS CA)

Organic Peroxides, Type E	H242
Serious eye damage/eye irritation, Category 2	H319
Skin sensitisation, Category 1	H317
Reproductive toxicity, Category 1B	H360
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)



GHS02

GHS07

GHS08

GHS09

Signal word (GHS CA)

Danger

Hazardous ingredients

methacrylates, dibenzoyl peroxide, 2-ethylhexyl benzoate

Hazard statements (GHS CA)

H242 - Heating may cause a fire.
 H317 - May cause an allergic skin reaction.
 H319 - Causes serious eye irritation.
 H360 - May damage fertility or the unborn child.
 H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (GHS CA)

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P280 - Wear eye protection, protective clothing, protective gloves.
 P262 - Do not get in eyes, on skin, or on clothing.

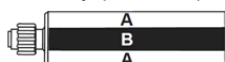
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Safety information for 2-Component-products

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

Plastic-cartridge, contains:
 Methacrylate resin, inorganic filler
 Dibenzoyl peroxide, phlegmatized



Name	General description	Quantity	Unit	Classification (GHS CA)
HIT-ICE, A		1	pcs (pieces)	Skin Sens. 1, H317 Aquatic Chronic 3, H412
HIT-ICE, B		1	pcs (pieces)	Org. Perox. E, H242 Eye Irrit. 2, H319 Skin Sens. 1, H317 Repr. 1B, H360 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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
Storage conditions	Keep cool. Protect from sunlight.
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 Provide good ventilation in process area to prevent formation of vapour
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 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 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

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Safety information for 2-Component-products

First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air Allow the victim to rest
First-aid measures after skin contact	Wash contaminated clothing before reuse. Wash with plenty of water/... If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures general	Take off immediately all contaminated clothing. Never give anything by mouth to an unconscious person If you feel unwell, seek medical advice (show the label where possible)
Symptoms/effects after eye contact	Causes serious eye irritation.
Symptoms/effects after skin contact	May cause an allergic skin reaction.

SECTION 7: Fire fighting measures

Firefighting instructions	Use water spray or fog for cooling exposed containers Exercise caution when fighting any chemical fire Prevent fire fighting water from entering the environment
Protection during firefighting	Self-contained breathing apparatus Do not enter fire area without proper protective equipment, including respiratory protection
Hazardous decomposition products in case of fire	Thermal decomposition generates : Carbon dioxide Carbon monoxide

SECTION 8: Other information

No data available

HIT-ICE, B

Safety Data Sheet

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

Date of issue: 01/31/2020

Revision date: 01/31/2020

Supersedes: 12/21/2015

Version: 7.0

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

1.1. Product identifier

Product form	Mixture
Product name	HIT-ICE, B
Product code	BU Anchor

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

No additional information available

1.3. Details of the supplier of the safety data sheet

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 Entwicklungsgesellschaft mbH
Hiltistraße 6
86916 Kaufering - Deutschland
T +49 8191 906876
anchor.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: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Org. Perox. E	H242
Eye Irrit. 2A	H319
Skin Sens. 1	H317
Repr. 1	H360
Aquatic Acute 1	H400
Aquatic Chronic 1	H410
Full text of H statements : see section 16	

2.2. Label elements

GHS CA labelling

Hazard pictograms (GHS CA)



GHS02

GHS07

GHS08

GHS09

Signal word (GHS CA)

Danger

Hazard statements (GHS CA)

H242 - Heating may cause a fire.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H360 - May damage fertility or the unborn child.
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (GHS CA)

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280 - Wear eye protection, protective clothing, protective gloves.
P262 - Do not get in eyes, on skin, or on clothing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302+P352 - IF ON SKIN: Wash with plenty of water.

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

2.3. Other hazards

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)
dibenzoyl peroxide	dibenzoyl peroxide; benzoyl peroxide	(CAS-No.) 94-36-0	25 - 40	Org. Perox. B, H241 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2-ethylhexyl benzoate	2-ethylhexyl benzoate / benzoic acid, 2-ethylhexyl ester	(CAS-No.) 5444-75-7	10 - 20	Repr. 1B, H360
Quartz (SiO ₂)	quartz / quartz (SiO ₂) / quartz flour, 1%≤conc respirable crystalline silica<10% / silicon (di)oxide (quartz), 1%≤conc respirable crystalline silica<10%	(CAS-No.) 14808-60-7	1 - 2.5	Carc. 1A, H350

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 general	Take off immediately all contaminated clothing. 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. Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	Wash contaminated clothing before reuse. Wash with plenty of water/.... If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	Rinse mouth. Drink plenty of water. Get medical advice/attention. Do not induce vomiting. Obtain emergency medical attention.

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

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

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

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Safety Data Sheet

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

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

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

No additional information available

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 Self-contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures Spilled material may present a slipping hazard.

6.2. Methods and materials 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. 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 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. Provide good ventilation in process area to prevent formation of vapour.

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

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions Keep cool. Protect from sunlight.

Incompatible products Strong bases. Strong acids.

Incompatible materials Sources of ignition. Direct sunlight.

Storage temperature 5 - 25 °C

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Quartz (SiO ₂) (14808-60-7)		
Ontario	OEL TWA (mg/m ³)	0.1 mg/m ³

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Safety Data Sheet

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

Quartz (SiO ₂) (14808-60-7)		
Ontario	Notations and remarks	(R)
Ontario	Regulatory reference	Ontario Occupational Exposure Limits under Regulation 833
dibenzoyl peroxide (94-36-0)		
Alberta	OEL TWA (mg/m ³)	5 mg/m ³
Alberta	Notations and remarks	URT & skin irr
British Columbia	OEL TWA (mg/m ³)	5 mg/m ³
British Columbia	Notations and remarks	URT & skin irr

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

8.2. Appropriate engineering controls

Environmental exposure controls Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

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.

Eye protection Wear security glasses which protect from splashes.

Skin and body protection Wear suitable protective clothing.

Environmental exposure controls Avoid release to the environment.

Consumer exposure controls Avoid contact during pregnancy/while nursing.

Other information Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid
Appearance	Thixotropic paste.
Colour	white.
Odour	characteristic.
Odour threshold	Not determined
pH	No data available
Relative evaporation rate (butylacetate=1)	No data available
Melting point	No data available
Freezing point	>= -25 °C
Boiling point	No data available
Flash point	No data available
Auto-ignition temperature	Not self-igniting
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

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

Density	1.35 g/ml DIN 51757
Solubility	Water: Not miscible
Log Pow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	< 55 - 95 mPa·s (HN 570-1)
Explosive properties	Heating may cause a fire.
Oxidising properties	May cause fire or explosion; strong oxidiser.
Explosive limits	No data available

9.2. Other information

SADT	> 50 °C
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SECTION 10: Stability and reactivity

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

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-ethylhexyl benzoate (5444-75-7)	
LD50 oral rat	2500 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Male / female, Experimental value, Oral)
LD50 dermal rat	>= 5000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal)

Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory or skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	May damage fertility or the unborn child.
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified
Potential adverse human health effects and symptoms	No additional information available.
Symptoms/effects after skin contact	May cause an allergic skin reaction.
Symptoms/effects after eye contact	May cause severe irritation.

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Safety Data Sheet

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

Product/Packaging disposal recommendations	After curing, the product can be disposed of with household waste. . Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. Packaging contaminated by the product : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	Avoid release to the environment.

SECTION 14: Transport information

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

ADR	IMDG	IATA	RID
14.1. UN number			
3108	3108	3108	3108
14.2. UN proper shipping name			
ORGANIC PEROXIDE TYPE E, SOLID (dibenzoyl peroxide)	ORGANIC PEROXIDE TYPE E, SOLID (dibenzoyl peroxide)	Organic peroxide type e, solid (dibenzoyl peroxide)	ORGANIC PEROXIDE TYPE E, SOLID (dibenzoyl peroxide)
Transport document description			
UN 3108 ORGANIC PEROXIDE TYPE E, SOLID (dibenzoyl peroxide), 5.2, (D)	UN 3108 ORGANIC PEROXIDE TYPE E, SOLID (dibenzoyl peroxide), 5.2	UN 3108 Organic peroxide type e, solid (dibenzoyl peroxide), 5.2	UN 3108 ORGANIC PEROXIDE TYPE E, SOLID (dibenzoyl peroxide), 5.2
14.3. Transport hazard class(es)			
5.2	5.2	5.2	5.2
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
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)			
No supplementary information available			

14.6. Special precautions for user

- Overland transport

Classification code (ADR)	P1
Special provisions (ADR)	122, 274
Limited quantities (ADR)	500g
Packing instructions (ADR)	P520
Mixed packing provisions (ADR)	MP4
Transport category (ADR)	2
Tunnel restriction code (ADR)	D

- Transport by sea

Special provisions (IMDG)	122, 274
Limited quantities (IMDG)	500 g
Packing instructions (IMDG)	P520

HIT-ICE, B

Safety Data Sheet

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

EmS-No. (Fire)	F-J
EmS-No. (Spillage)	S-R
Stowage category (IMDG)	D
Stowage and segregation (IMDG)	Protected from sources of heat 'Separated from' acids and alkalis.
MFAG-No	145

- Air transport

PCA packing instructions (IATA)	570
PCA max net quantity (IATA)	10kg
CAO packing instructions (IATA)	570
Special provisions (IATA)	A20

- Rail transport

Special provisions (RID)	122, 274
Limited quantities (RID)	500g
Packing instructions (RID)	P520
Carriage prohibited (RID)	No

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

SECTION 15: Regulatory information

15.1. National regulations

Quartz (SiO₂) (14808-60-7)
Listed on the Canadian DSL (Domestic Substances List)
dibenzoyl peroxide (94-36-0)
Listed on the Canadian DSL (Domestic Substances List)

15.2. International regulations

Quartz (SiO₂) (14808-60-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
dibenzoyl peroxide (94-36-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
2-ethylhexyl benzoate (5444-75-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

SECTION 16: Other information

Date of issue	01-31-2020
Revision date	01-31-2020
Supersedes	12-21-2015

Indication of changes:

Section	Changed item	Change	Comments
2.1	Classification (GHS CA)	Modified	
2.2	Hazard pictograms (GHS CA)	Added	
2.2	Hazard statements (GHS CA)	Modified	
3.2	Composition/information on ingredients	Modified	
16	Additional information	Added	

Other information: None.

HIT-ICE, B

Safety Data Sheet

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

Full text of H-statements:

H241	Heating may cause a fire or explosion.
H242	Heating may cause a fire.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H350	May cause cancer.
H360	May damage fertility or the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

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.

HIT-ICE, A

Safety Data Sheet

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

Date of issue: 01/31/2020

Revision date: 01/31/2020

Supersedes: 10/26/2016

Version: 6.4

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

1.1. Product identifier

Product form	Mixture
Product name	HIT-ICE, A
Product code	BU Anchor

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

No additional information available

1.3. Details of the supplier of the safety data sheet

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 Entwicklungsgesellschaft mbH
Hiltistraße 6
86916 Kaufering - Deutschland
T +49 8191 906876
anchor.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: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Skin Sens. 1	H317
Aquatic Chronic 3	H412
Full text of H statements : see section 16	

2.2. Label elements

GHS CA labelling

Hazard pictograms (GHS CA)



GHS07

Signal word (GHS CA)

Warning

Hazard statements (GHS CA)

H317 - May cause an allergic skin reaction.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (GHS CA)

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.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS CA)

No data available

HIT-ICE, A

Safety Data Sheet

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

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
Quartz (SiO ₂)	quartz / quartz (SiO ₂) / quartz flour, 1%≤conc respirable crystalline silica<10% / silicon (di)oxide (quartz), 1%≤conc respirable crystalline silica<10%	(CAS-No.) 14808-60-7	40 - 60	Carc. 1A, H350
Ethoxylated Bisphenol A Dimethacrylate	bisphenol A ethoxylate (2 EO/phenol) dimethacrylate, technical, average MW=540 / poly(oxy-1,2-ethanediyl), alpha, alpha'-[(1-methylethylidene)di-4,1-phenylene]bis[omega-[(2-methyl-1-oxo-2-propenyl)oxy]-	(CAS-No.) 41637-38-1	10 - 25	Aquatic Chronic 4, H413
1,6-hexanediyl bismethacrylate	1,6-HDDMA / 1,6-hexanediyl bis(2-methacrylate) / 1,6-hexanediyl bismethacrylate / 2-methyl-1,6-hexanediyl-2-propanoate / 2-propanoic acid, 2-methyl-, 1,6-hexanediyl ester / hexane-1,6-diyl bis(2-methacrylate) / hexane-1,6-diyl bis(2-methylprop-2-enoate)	(CAS-No.) 6606-59-3	5 - 10	Aquatic Chronic 3, H412
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol	1,2-propanediol, 2-methyl, monomethacrylate / 2-propenoic acid, 2-methyl-, 2-hydroxymethylethyl ester / 2-propenoic acid, 2-methyl-, monoester with 1,2-propanediol / hydroxypropyl methacrylate / methacrylic acid, ester with 1,2-propanediol / methacrylic acid, monoester with 1,2-propanediol / methacrylic acid, monoester with propane-1,2-diol / propylene glycol monomethacrylate / ROCRYL 410	(CAS-No.) 27813-02-1	5 - 10	Eye Irrit. 2A, H319 Skin Sens. 1, H317
1,1,1-Trimethylolpropane trimethacrylate		(CAS-No.) 3290-92-4	2.5 - 5	Aquatic Chronic 2, H411
1,1'-(p-tolylimino)diprop-2-ol	DiPpT	(CAS-No.) 38668-48-3	0.1 - 1	Acute Tox. 2 (Oral), H300 Eye Irrit. 2A, H319 Aquatic Chronic 3, H412
Methyl methacrylate	methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate 2-(methoxycarbonyl)-1-propene / 2-methyl propenoic acid, methyl ester / 2-methyl-2-propenoic acid, methyl ester / 2-propenoic acid, 2-methyl-, methyl ester / acrylic acid, 2-methyl-, methyl ester / diakon / methacrylic acid methyl ester / methyl 2-methylacrylate / methyl 2-methylprop-2-enoate / methyl 2-methylpropenoate / methyl methacrylate / methyl-2-methyl-2-propenoate / methyl-alpha-methacrylate / methyl-alpha-methylacrylate / methylmethacrylate / methylpropylene-2-carboxylate / MMA / MME / monocyte methacrylate monomer / pegalan	(CAS-No.) 80-62-6	0.11004 - 0.14148	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335

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

HIT-ICE, A

Safety Data Sheet

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

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	Take off immediately all contaminated clothing. 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. Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	Wash contaminated clothing before reuse. Wash with plenty of water/.... If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	Rinse mouth. Drink plenty of water. Get medical advice/attention. Do not induce vomiting. Obtain emergency medical attention.

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

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

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 Water spray. Carbon dioxide. Dry powder. Foam. 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

No additional information available

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	Self-contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures Spilled material may present a slipping hazard.

6.2. Methods and materials 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. 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"

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	Wear personal protective equipment. Avoid contact with skin and eyes. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.
Hygiene measures	Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	Keep cool. Protect from sunlight.
Incompatible products	Strong bases. Strong acids.
Incompatible materials	Sources of ignition. Direct sunlight.
Storage temperature	5 - 25 °C
Heat and ignition sources	Keep away from heat and direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Quartz (SiO ₂) (14808-60-7)		
Ontario	OEL TWA (mg/m ³)	0.1 mg/m ³
Ontario	Notations and remarks	(R)
Ontario	Regulatory reference	Ontario Occupational Exposure Limits under Regulation 833

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

8.2. Appropriate engineering controls

Environmental exposure controls Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

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.
Eye protection	Wear security glasses which protect from splashes.
Skin and body protection	Wear suitable protective clothing.
Environmental exposure controls	Avoid release to the environment.
Consumer exposure controls	Avoid contact during pregnancy/while nursing.
Other information	Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid
Appearance	Thixotropic paste.

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Colour	Grey.
Odour	characteristic.
Odour threshold	Not determined
pH	No data available
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	Not self-igniting
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	1.69 g/ml DIN 51757
Solubility	Water: Not miscible
Log Pow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	55 Pa·s HN-0333
Explosive properties	Product is not explosive.
Oxidising properties	No data available
Explosive limits	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

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

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

Ethoxylated Bisphenol A Dimethacrylate (41637-38-1)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg
1,6-hexanediyl bismethacrylate (6606-59-3)	
LD50 oral rat	> 15000 mg/kg (Rat; Literature study)

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2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
LD50 oral rat	> 5000 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; \geq 2000 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	\geq 5000 mg/kg bodyweight (Rabbit; Experimental value)

1,1,1-Trimethylolpropane trimethacrylate (3290-92-4)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 3000 mg/kg

1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)	
LD50 oral rat	25 mg/kg
LD50 dermal rat	> 2000 mg/kg

Methyl methacrylate (80-62-6)	
LD50 oral rat	> 6000 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; 7900 mg/kg bodyweight; Rat; Equivalent or similar to OECD 401; Weight of evidence; 8400 mg/kg bodyweight; Rat; Weight of evidence)
LD50 dermal rabbit	> 7550 mg/kg (Rabbit; Literature study; Equivalent or similar to OECD 402; >5000 mg/kg bodyweight; Rabbit; Experimental value)
LC50 inhalation rat (mg/l)	27.5 mg/l/4h (Rat; Literature study)

Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Not classified
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	32544.379 mm ² /s

Potential adverse human health effects and symptoms	No additional information available.
Symptoms/effects after skin contact	May cause an allergic skin reaction.
Symptoms/effects after eye contact	May cause severe irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ethoxylated Bisphenol A Dimethacrylate (41637-38-1)	
LC50 fish 1	> 100 mg/l
EC50 Daphnia 1	> 100 mg/l
NOEC (acute)	> 100 mg/l

1,6-hexanediyl bismethacrylate (6606-59-3)	
LC50 fish 1	4.5 mg/l (96 h; Brachydanio rerio)

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
LC50 fish 1	493 mg/l (48 h; Leuciscus idus; GLP)
EC50 Daphnia 1	> 143 mg/l (48 h; Daphnia magna; GLP)
Threshold limit algae 1	> 97.2 mg/l (72 h; Pseudokirchneriella subcapitata; GLP)
Threshold limit algae 2	> 97.2 mg/l (72 h; Pseudokirchneriella subcapitata; GLP)

1,1,1-Trimethylolpropane trimethacrylate (3290-92-4)	
LC50 fish 1	2 mg/l
ErC50 (algae)	3.88 mg/l
NOEC chronic fish	0.138 mg/l
NOEC chronic crustacea	0.177 mg/l

1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)	
LC50 fish 1	\approx 17 mg/l
LC50 other aquatic organisms 1	245 mg/l
EC50 Daphnia 1	28.8 mg/l

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NOEC (acute)	57.8 mg/l
Methyl methacrylate (80-62-6)	
LC50 fish 1	130 mg/l (96 h; Pimephales promelas; Lethal)
EC50 Daphnia 1	69 mg/l (48 h; Daphnia magna; GLP)
LC50 fish 2	191 mg/l (96 h; Lepomis macrochirus)
EC50 Daphnia 2	502 mg/l (24 h; Daphnia magna)
TLM fish 1	159 mg/l (96 h; Pimephales promelas)
Threshold limit other aquatic organisms 1	100 mg/l (16 h; Pseudomonas putida)
Threshold limit algae 1	37 mg/l (168 h; Scenedesmus quadricauda; Toxicity test)
Threshold limit algae 2	120 mg/l (192 h; Microcystis aeruginosa)

12.2. Persistence and degradability

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Persistence and degradability	Not established.
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
Persistence and degradability	Readily biodegradable in water.
Methyl methacrylate (80-62-6)	
Biochemical oxygen demand (BOD)	0.14 g O ₂ /g substance
ThOD	1.9 g O ₂ /g substance
BOD (% of ThOD)	0.073

12.3. Bioaccumulative potential

HIT-ICE, A	
Bioaccumulative potential	Not established.
Ethoxylated Bisphenol A Dimethacrylate (41637-38-1)	
Bioconcentration factor (BCF REACH)	52.13
Log Pow	3.43 - 5.62 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method)
Log Kow	5.3
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
BCF fish 1	<= 100
BCF fish 2	3.2 Quantitative structure-activity relationship (QSAR)
Log Pow	0.97 (OECD 102 method)
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500).
1,1,1-Trimethylolpropane trimethacrylate (3290-92-4)	
BCF fish 2	366 l/kg
Log Pow	3.53
Log Kow	4.39
1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)	
BCF fish 1	≈
Log Kow	2.1
Methyl methacrylate (80-62-6)	
BCF fish 1	2.97 - 3.5 (Pisces)
Log Pow	1.32 - 1.38 (Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method; 20 °C)
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).

12.4. Mobility in soil

Ethoxylated Bisphenol A Dimethacrylate (41637-38-1)	
Log Koc	2.56 (2.56 - 3.88)
Ecology - soil	Low potential for adsorption in soil.
1,6-hexanediyl bismethacrylate (6606-59-3)	
Ecology - soil	No (test)data on mobility of the substance available.
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
Ecology - soil	Low potential for adsorption in soil.
Methyl methacrylate (80-62-6)	
Surface tension	28.9 mN/m (20 °C)
Log Koc	0.94 - 1.86 (log Koc, Other, Experimental value, GLP)

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Ecology - soil	Highly mobile in soil.
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12.5. Other adverse effects

Other information Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional legislation (waste) Disposal must be done according to official regulations.
 Product/Packaging disposal recommendations After curing, the product can be disposed of with household waste. . Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. Packaging contaminated by the product : Dispose in a safe manner in accordance with local/national regulations.
 Ecology - waste materials Avoid release to the environment.

SECTION 14: Transport information

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

ADR	IMDG	IATA	RID
14.1. UN number			
Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name			
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available			

14.6. Special precautions for user

- Overland transport

- Transport by sea

No data available

- Air transport

No data available

- Rail transport

Carriage prohibited (RID) No

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

SECTION 15: Regulatory information

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15.1. National regulations

Quartz (SiO₂) (14808-60-7)
Listed on the Canadian DSL (Domestic Substances List)
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)
Listed on the Canadian DSL (Domestic Substances List)
1,1'-(p-tolylimino)dipropen-2-ol (38668-48-3)
Listed on the Canadian DSL (Domestic Substances List)

15.2. International regulations

Quartz (SiO₂) (14808-60-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Ethoxylated Bisphenol A Dimethacrylate (41637-38-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
1,6-hexanediyl bismethacrylate (6606-59-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
1,1,1-Trimethylolpropane trimethacrylate (3290-92-4)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
1,1'-(p-tolylimino)dipropen-2-ol (38668-48-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Methyl methacrylate (80-62-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

SECTION 16: Other information

SDS Major/Minor	None
Date of issue	01-31-2020
Revision date	01-31-2020
Supersedes	10-26-2016

Indication of changes:

Section	Changed item	Change	Comments
2.1	Classification (GHS CA)	Removed	
2.2	Hazard statements (GHS CA)	Removed	
3.2	Composition/information on ingredients	Modified	
16	Additional information	Added	

Other information None.

Full text of H-statements:

H225	Highly flammable liquid and vapour.
H300	Fatal if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H350	May cause cancer.
H412	Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms:

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ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

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.