

HIT-ICE

Safety information for 2-Component-products

Date of issue: 30/01/2017

Revision date: 23/01/2017

Supersedes: 07/11/2016

Version: 6.4

SECTION 1: Kit identification

1.1 Product identifier

Name

HIT-ICE



Product code

BU Anchor

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

Hilti, Inc.
Legacy Tower, Suite 1000
75024 Plano - USA
T +1 9724035800
1-800-879-8000 toll free - F +1 918 254 0522

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

GHS-US classification

Label elements

GHS-US labelling

Hazard pictograms (GHS-US)



GHS02



GHS07



GHS09

Signal word (GHS-US)

Danger

Hazardous ingredients

methacrylates, dibenzoyl peroxide

Hazard statements (GHS-US)

H242 - Heating may cause a fire
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (GHS-US)

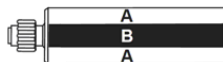
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P280 - Wear eye protection, protective clothing, protective gloves
P262 - Do not get in eyes, on skin, or on clothing
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P337+P313 - If eye irritation persists: Get medical advice/attention
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention

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Safety information for 2-Component-products

Additional information

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



Name	General description	Quantity	Unit	GHS-US classification
HIT-ICE, A		1	pcs (pieces)	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412
HIT-ICE, B		1	pcs (pieces)	Org. Perox. EF, H242 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400

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
First-aid measures after inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing Assure fresh air breathing Allow the victim to rest
First-aid measures after skin contact	Wash contaminated clothing before reuse Wash with plenty of soap and water If skin irritation or rash occurs: Get medical advice/attention
First-aid measures general	Remove/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)

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Safety information for 2-Component-products

Symptoms/injuries after eye contact	Causes serious eye irritation
Symptoms/injuries after skin contact	May cause an allergic skin reaction
Other medical advice or treatment	Treat symptomatically

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 Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 01/30/2017

Revision date: 12/21/2015

Supersedes: 05/18/2015

Version: 6.2

SECTION 1: Identification

1.1. Identification

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

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

Use of the substance/mixture	Composite mortar component for fasteners in the construction industry
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1.3. Details of the supplier of the safety data sheet

Supplier	Department issuing data specification sheet
Hilti, Inc.	Hilti Entwicklungsgesellschaft mbH
Legacy Tower, Suite 1000	Hiltistraße 6
75024 Plano - USA	86916 Kaufering - Deutschland
T +1 9724035800	T +49 8191 906310 - F +49 8191 90176310
1-800-879-8000 toll free - F +1 918 254 0522	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)
	+1 918 8723000
	1-800-879-8000 toll free

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Org. Perox. C	H242 - Heating may cause a fire
Eye Irrit. 2A	H319 - Causes serious eye irritation
Skin Sens. 1	H317 - May cause an allergic skin reaction
Aquatic Acute 1	H400 - Very toxic to aquatic life

Full text of H statements : see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US)



GHS02



GHS07



GHS09

Signal word (GHS-US)

Danger

Hazard statements (GHS-US)

H242 - Heating may cause a fire
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H400 - Very toxic to aquatic life

Precautionary statements (GHS-US)

P280 - Wear protective gloves/protective clothing/eye protection/face protection
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

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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P337+P313 - If eye irritation persists: Get medical advice/attention
P302+P352 - If on skin: Wash with plenty of water/...
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Quartz	(CAS No) 14808-60-7	40 - 60	Carc. 1A, H350
dibenzoyl peroxide	(CAS No) 94-36-0	25 - 40	Org. Perox. B, H241 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	Remove/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 victim to fresh air and keep at rest in a position comfortable for breathing. Assure fresh air breathing. Allow the victim to rest.
First-aid measures after skin contact	Wash contaminated clothing before reuse. Wash with plenty of soap and 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/injuries after skin contact	May cause an allergic skin reaction.
Symptoms/injuries after eye contact	May cause severe irritation.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
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Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Protection during firefighting

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures

Spilled material may present a slipping hazard.

6.1.1. For non-emergency personnel

Emergency procedures

Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment

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

Emergency procedures

Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment

Collect spillage.

Methods for cleaning up

This material and its container must be disposed of in a safe way, and as per local legislation. Mechanically recover the product. Store away from other materials.

Other information

Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

Wear personal protective equipment. Avoid contact with skin and eyes. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. 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 (14808-60-7)		
OSHA	Remark (OSHA)	(3) See Table Z-3.
dibenzoyl peroxide (94-36-0)		
ACGIH	ACGIH TWA (mg/m³)	5 mg/m³
ACGIH	Remark (ACGIH)	URT & skin irr

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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

dibenzoyl peroxide (94-36-0)		
OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³

Additional information

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

8.2. Exposure controls

Personal protective equipment

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



Hand protection

Wear protective gloves. The permeation time is not the maximum wearing time! Generally speaking, it must be reduced. Contact with either mixtures of substances or different substances may shorten the protective function's effective duration.

Eye protection

Chemical goggles or safety glasses.

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
Melting point	No data available
Freezing point	>= -25 °C
Boiling point	No data available
Flash point	No data available
Relative evaporation rate (butylacetate=1)	No data available
Flammability (solid, gas)	No data available
Explosive limits	No data available
Explosive properties	Heating may cause a fire.
Oxidising properties	May cause fire or explosion; strong oxidiser.
Vapour pressure	No data available
Relative density	No data available
Relative vapour density at 20 °C	No data available
Density	1.35 g/ml DIN 51757
Solubility	No data available
Log Pow	No data available
Auto-ignition temperature	Not self-igniting
Decomposition temperature	No data available
Viscosity	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	< 55 - 95 mPa.s HN 570-1

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9.2. Other information

SADT > 50 °C

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

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 Not classified

dibenzoyl peroxide (94-36-0)	
LD50 oral rat	> 5000 mg/kg bodyweight (Rat; Equivalent or similar to OECD 401; Weight of evidence)
Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
	Based on available data, the classification criteria are not met
Carcinogenicity	Not classified
Quartz (14808-60-7)	
IARC group	1 - Carcinogenic to humans
dibenzoyl peroxide (94-36-0)	
IARC group	3 - Not classifiable
Reproductive toxicity	Not classified
	Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration hazard	Not classified
Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.

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

SECTION 12: Ecological information

12.1. Toxicity

dibenzoyl peroxide (94-36-0)	
LC50 fish 1	2 mg/l (96 h; Poecilia reticulata)
EC50 Daphnia 1	0.07 mg/l
LC50 fish 2	0.0602 mg/l (96h; Oncorhynchus mykiss; ECHA)
NOEC (acute)	0.0316 mg/l (96h; Oncorhynchus mykiss; ECHA)

12.2. Persistence and degradability

HIT-ICE, B	
Persistence and degradability	Not established.

dibenzoyl peroxide (94-36-0)	
Persistence and degradability	Readily biodegradable in water.

12.3. Bioaccumulative potential

HIT-ICE, B	
Bioaccumulative potential	Not established.

dibenzoyl peroxide (94-36-0)	
Log Pow	3.71
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming	No known effects from this product.
Other information	Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	Disposal must be done according to official regulations.
Waste disposal recommendations	Refer to manufacturer/supplier for information on recovery/recycling. Dispose of contents/container to Avoid release to the environment, Refer to manufacturer/supplier for information on recovery/recycling.
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

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Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

ADR	IMDG	IATA	RID
14.2. UN proper shipping name			
ORGANIC PEROXIDE TYPE E, SOLID	ORGANIC PEROXIDE TYPE E, SOLID	Organic peroxide type e, solid	ORGANIC PEROXIDE TYPE E, SOLID
Transport document description			
UN 3108 ORGANIC PEROXIDE TYPE E, SOLID, 5.2, (D)	UN 3108 ORGANIC PEROXIDE TYPE E, SOLID, 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
ADR 5.2.1.8.1 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
Tunnel restriction code (ADR)	D

- Transport by sea

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

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Limited quantities (RID)	500g
Packing instructions (RID)	P520
Carriage prohibited (RID)	No

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

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

dibenzoyl peroxide	CAS No 94-36-0	25 - 40%
dibenzoyl peroxide (94-36-0)		
Subject to reporting requirements of United States SARA Section 313		

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

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

Org. Perox. EF H242

Eye Irrit. 2 H319

Skin Sens. 1 H317

Aquatic Acute 1 H400

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

National regulations

Quartz (14808-60-7)
Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Revision date	12/21/2015
Other information	None.

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
H400	Very toxic to aquatic life

HIT-ICE, B

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SDS_US_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 Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 01/30/2017

Revision date: 10/26/2016

Supersedes: 12/21/2015

Version: 6.3

SECTION 1: Identification

1.1. Identification

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

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

Use of the substance/mixture	Composite mortar component for fasteners in the construction industry
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1.3. Details of the supplier of the safety data sheet

Supplier	Department issuing data specification sheet
Hilti, Inc.	Hilti Entwicklungsgesellschaft mbH
Legacy Tower, Suite 1000	Hiltistraße 6
75024 Plano - USA	86916 Kaufering - Deutschland
T +1 9724035800	T +49 8191 906310 - F +49 8191 90176310
1-800-879-8000 toll free - F +1 918 254 0522	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)
	+1 918 8723000
	1-800-879-8000 toll free

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Irrit. 2	H315 - Causes skin irritation
Eye Irrit. 2A	H319 - Causes serious eye irritation
Skin Sens. 1	H317 - May cause an allergic skin reaction
Aquatic Chronic 3	H412 - Harmful to aquatic life with long lasting effects

Full text of H statements : see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US)



GHS07

Signal word (GHS-US)

Warning

Hazard statements (GHS-US)

H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (GHS-US)

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

HIT-ICE, A

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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 US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Quartz	(CAS No) 14808-60-7	40 - 60	Carc. 1A, H350
Ethoxylated Bisphenol A Dimethacrylate	(CAS No) 41637-38-1	10 - 25	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,6-hexanediyl bismethacrylate	(CAS No) 6606-59-3	5 - 10	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
2-Hydroxypropyl methacrylate	(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	Not classified
TREATED FUMED SILICA	(CAS No) 67762-90-7	1 - 2.5	Not classified
1,1'-(p-tolylimino)dipropen-2-ol	(CAS No) 38668-48-3	0.1 - 1	Acute Tox. 2 (Oral), H300 Eye Irrit. 2A, H319 Aquatic Chronic 3, H412
Methyl methacrylate	(CAS No) 80-62-6	0.1 - 1	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	Remove/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 victim to fresh air and keep at rest in a position comfortable for breathing. Assure fresh air breathing. Allow the victim to rest.
First-aid measures after skin contact	Wash contaminated clothing before reuse. Wash with plenty of soap and 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/injuries after skin contact	May cause an allergic skin reaction.
Symptoms/injuries after eye contact	May cause severe irritation.

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

Treat symptomatically.

HIT-ICE, A

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	Spilled material may present a slipping hazard.
6.1.1. For non-emergency personnel	
Emergency procedures	Evacuate unnecessary personnel.
6.1.2. For emergency responders	
Protective equipment	Use personal protective equipment as required. Equip cleanup crew with proper protection.
Emergency procedures	Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment	Collect spillage.
Methods for cleaning up	This material and its container must be disposed of in a safe way, and as per local legislation. Mechanically recover the product. Store away from other materials.
Other information	Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	Wear personal protective equipment. Avoid contact with skin and eyes. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. 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.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

TREATED FUMED SILICA (67762-90-7)		
ACGIH	ACGIH TWA (mg/m ³)	3 mg/m ³
Not applicable		
Ethoxylated Bisphenol A Dimethacrylate (41637-38-1)		
Not applicable		
1,6-hexanediyl bismethacrylate (6606-59-3)		
Not applicable		
1,1,1-Trimethylolpropane trimethacrylate (3290-92-4)		
Not applicable		
2-Hydroxypropyl methacrylate (27813-02-1)		
Not applicable		
1,1'-(p-tolylimino)dipropen-2-ol (38668-48-3)		
Not applicable		
Methyl methacrylate (80-62-6)		
ACGIH	ACGIH TWA (ppm)	50 ppm
ACGIH	ACGIH STEL (ppm)	100 ppm
ACGIH	Remark (ACGIH)	URT & eye irr; body weight eff; DSEN; RSEN; A4
OSHA	OSHA PEL (TWA) (mg/m ³)	410 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	100 ppm
Quartz (14808-60-7)		
OSHA	Remark (OSHA)	(3) See Table Z-3.

Additional information

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

8.2. Exposure controls

Personal protective equipment

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



Hand protection

Wear protective gloves. The permeation time is not the maximum wearing time! Generally speaking, it must be reduced. Contact with either mixtures of substances or different substances may shorten the protective function's effective duration.

Eye protection

Chemical goggles or safety glasses.

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.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid
Appearance	Thixotropic paste.
Colour	Grey
Odour	characteristic
Odour threshold	Not determined
pH	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Relative evaporation rate (butylacetate=1)	No data available
Flammability (solid, gas)	No data available
Explosive limits	No data available
Explosive properties	Product is not explosive.
Oxidising properties	No data available
Vapour pressure	No data available
Relative density	No data available
Relative vapour density at 20 °C	No data available
Density	1.69 g/ml DIN 51757
Solubility	No data available
Log Pow	No data available
Auto-ignition temperature	Not self-igniting
Decomposition temperature	No data available
Viscosity	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	55 Pa.s HN-0333

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

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

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Not classified

TREATED FUMED SILICA (67762-90-7)	
LD50 oral rat	> 1000 mg/kg (Rat)
LD50 dermal rat	> 2000 mg/kg (Rat)
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)
1,1,1-Trimethylolpropane trimethacrylate (3290-92-4)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 3000 mg/kg
2-Hydroxypropyl methacrylate (27813-02-1)	
LD50 oral rat	> 5000 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; >=2000 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	>= 5000 mg/kg bodyweight (Rabbit; Experimental value)
1,1'-(p-tolylimino)dipropen-2-ol (38668-48-3)	
LD50 oral rat	25 mg/kg
LD50 dermal rat	> 2000 mg/kg
ATE US (oral)	25.000 mg/kg bodyweight
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)
ATE US (vapours)	27.500 mg/l/4h
ATE US (dust,mist)	27.500 mg/l/4h

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

Not classified

Based on available data, the classification criteria are not met

Carcinogenicity

Not classified

Methyl methacrylate (80-62-6)	
IARC group	3 - Not classifiable
Quartz (14808-60-7)	
IARC group	1 - Carcinogenic to humans

Reproductive toxicity

Not classified

Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure)

Not classified

Specific target organ toxicity (repeated exposure)

Not classified

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Aspiration hazard	Not classified
Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.
Symptoms/injuries after skin contact	May cause an allergic skin reaction.
Symptoms/injuries 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)
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
2-Hydroxypropyl methacrylate (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'-(p-tolylimino)dipropen-2-ol (38668-48-3)	
LC50 fish 1	≈ 17 mg/l
LC50 other aquatic organisms 1	245 mg/l
EC50 Daphnia 1	28.8 mg/l
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

HIT-ICE, A	
Persistence and degradability	Not established.
TREATED FUMED SILICA (67762-90-7)	
Persistence and degradability	Biodegradability in soil: no data available.
Ethoxylated Bisphenol A Dimethacrylate (41637-38-1)	
Persistence and degradability	Biodegradability in water: no data available.
1,6-hexanediyl bismethacrylate (6606-59-3)	
Persistence and degradability	No test data of component(s) available. Biodegradability in soil: no data available. No (test) data on mobility of the substance available.

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2-Hydroxypropyl methacrylate (27813-02-1)	
Persistence and degradability	Readily biodegradable in water.

Methyl methacrylate (80-62-6)	
Persistence and degradability	Readily biodegradable in water. No (test)data on mobility of the substance available. Photolysis in the air.
Biochemical oxygen demand (BOD)	0.14 g O ₂ /g substance
ThOD	1.9 g O ₂ /g substance
BOD (% of ThOD)	0.073 % ThOD

12.3. Bioaccumulative potential

HIT-ICE, A	
Bioaccumulative potential	Not established.

TREATED FUMED SILICA (67762-90-7)	
Bioaccumulative potential	No bioaccumulation data available.

Ethoxylated Bisphenol A Dimethacrylate (41637-38-1)	
Bioconcentration factor (BCF REACH)	52.13
Log Kow	5.3
Bioaccumulative potential	No bioaccumulation data available.

1,6-hexanediyl bismethacrylate (6606-59-3)	
Bioaccumulative potential	No test data of component(s) available.

1,1,1-Trimethylolpropane trimethacrylate (3290-92-4)	
BCF fish 2	366 l/kg
Log Pow	3.53
Log Kow	4.39

2-Hydroxypropyl methacrylate (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'-(p-tolylimino)dipropen-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 potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

Ethoxylated Bisphenol A Dimethacrylate (41637-38-1)	
Log Koc	2.56 (2.56 - 3.88)

Methyl methacrylate (80-62-6)	
Surface tension	0.028 N/m (20 °C)

12.5. Other adverse effects

Effect on the global warming	No known effects from this product.
Other information	Avoid release to the environment.

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	Disposal must be done according to official regulations.
Waste disposal recommendations	Refer to manufacturer/supplier for information on recovery/recycling. Dispose of contents/container to Avoid release to the environment, Refer to manufacturer/supplier for information on recovery/recycling.
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 regulated for transport			
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
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 73/78 and the IBC Code

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

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Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Methyl methacrylate	CAS No 80-62-6	0.1 - 1%
TREATED FUMED SILICA (67762-90-7)		
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C))	
Ethoxylated Bisphenol A Dimethacrylate (41637-38-1)		
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C))	
Methyl methacrylate (80-62-6)		
Subject to reporting requirements of United States SARA Section 313		
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA	
CERCLA RQ	1000 lb	

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

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

Skin Irrit. 2 H315

Eye Irrit. 2 H319

Skin Sens. 1 H317

Aquatic Chronic 3 H412

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

National regulations

Quartz (14808-60-7)
Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Revision date	10/26/2016
Other information	None.

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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
H413	May cause long lasting harmful effects to aquatic life

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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