

HIT-1

Safety information for 2-Component-products

Date of issue: 22/02/2017 Revision date: 09/01/2017 Version: 1.0

SECTION 1: Kit identification

1.1 Product identifier

Name HIT-1

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

Hilti AG Feldkircherstraße 100 9494 Schaan - Liechtenstein T +423 234 2111 - F +423 234 2965 www.hilti.com

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

Eye Irrit. 2 H319 Skin Sens. 1 H317 Aquatic Acute 1 H400

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

Label elements

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

Hazard pictograms (CLP)





GHS07

Signal word (CLP) Warni

Hazardous ingredients methacrylates, dibenzoyl peroxide

Hazard statements (CLP)

H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H400 - Very toxic to aquatic life

Precautionary statements (CLP) 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

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

09/03/2017 EN (English) 1/20

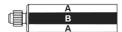


HIT-1

Kit Safety Information Sheet

Additional information

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



Name	General description	Quantity	Unit	Classification according to Regulation (EC) No. 1272/2008 [CLP]
HIT-1, A		1	pcs (pieces)	Eye Irrit. 2, H319 Skin Sens. 1, H317
HIT-1, B		1	pcs (pieces)	Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400

SECTION 4: General information

No data available

For containment

Incompatible products

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

Collect spillage

Incompatible materials Sources of ignition

Direct sunlight
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)

Symptoms/effects after eye contact May cause severe irritation

09/03/2017 EN (English) 2/20



HIT-1

Kit Safety Information Sheet

Symptoms/effects after skin contact

May cause an allergic skin reaction

SECTION 7: Fire fighting measures

Exercise caution when fighting any chemical fire

Prevent fire fighting water from entering the environment

Protection during firefighting Self-contained breathing apparatus

Do not enter fire area without proper protective equipment, including respiratory protection

Hazardous decomposition products in case of

fire

Thermal decomposition generates :

Carbon dioxide Carbon monoxide

SECTION 8: Other information

No data available

09/03/2017 EN (English) 3/20



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 22/02/2017 Revision date: 09/01/2017 : Version: 1.0

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

1.1. Product identifier

Product form Mixture

Name HIT-1, B

Product code BU Anchor

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

1.2.1. Relevant identified uses

Industrial/Professional use spec For professional use only

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

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier Department issuing data specification sheet

Hilti AG Hilti Entwicklungsgesellschaft mbH Feldkircherstraße 100 Hiltistraße 6

9494 Schaan - Liechtenstein 86916 Kaufering - Deutschland

T +423 234 2111 - F +423 234 2965 T +49 8191 906310 - F +49 8191 90176310

www.hilti.com anchor.hse@hilti.com

1.4. Emergency telephone number

Emergency number Schweizerisches Toxikologisches Informationszentrum – 24h Service

+41 44 251 51 51 (international)

+423 234 2111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Eye Irrit. 2 H319 Skin Sens. 1 H317 Aquatic Acute 1 H400

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

2.2. Label elements

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

Hazard pictograms (CLP)





GHS07

Warning

GHS09

Signal word (CLP)

Hazardous ingredients dibenzoyl peroxide

Hazard statements (CLP)

H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation

H400 - Very toxic to aquatic life

09/03/2017 EN (English) 4/20



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Precautionary statements (CLP) 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

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

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
dibenzoyl peroxide	(CAS No) 94-36-0 (EC No) 202-327-6	1 - 15	Org. Perox. B, H241 Eve Irrit. 2. H319
	(EC Index No) 617-008-00-0 (REACH-no) 01-2119511472-50		Skin Sens. 1, H317 Aguatic Acute 1, H400 (M=10)

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of f	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/effects after skin contact May cause an allergic skin reaction.

Symptoms/effects after eye contact May cause severe irritation.

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

Treat symptomatically.

09/03/2017 EN (English) 5/20



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

Hazardous decomposition products in case of

fire

Thermal decomposition generates: Carbon dioxide. Carbon monoxide.

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

09/03/2017 EN (English) 6/20



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Heat and ignition sources

Keep away from heat and direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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

Туре	Material	Permeation	Thickness (mm)	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,12	EN 374

Eye protection Chemical goggles or safety glasses

Туре	Use	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166, EN 170

Skin and body protection

Wear suitable protective clothing



Physical state





Environmental exposure controls Avoid release to the environment.

Consumer exposure controls Avoid contact during pregnancy/while nursing.

Solid

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

Appearance Thixotropic paste.

Colour Black.

Odour No data available

Odour threshold No data available

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
Boiling point

No data available
Flash point

No data available
Auto-ignition temperature

No data available
Decomposition temperature

No data available

09/03/2017 EN (English) 7/20



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

No data available Vapour pressure Relative vapour density at 20 °C No data available Relative density No data available 1.59 a/cm³ Density Solubility No data available Log Pow No data available Viscosity, kinematic No data available Viscosity, dynamic No data available No data available Explosive properties Oxidising properties No data available No data available **Explosive limits**

9.2. Other information

VOC content 4.3 % (DIN EN ISO 11890-2)

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
Reproductive toxicity	Not classified
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration hazard	Not classified

09/03/2017 EN (English) 8/20



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

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

12.3. Bioaccumulative potential

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. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

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.

European List of Waste (LoW) code 08 04 09* - waste adhesives and sealants containing organic solvents or other dangerous

substances

SECTION 14: Transport information

In accordance with ADR / IATA / IMDG / RID

Other information No supplementary information available

ADR	IMDG	IATA	RID
14.1. UN number			
Not regulated for transport			
14.2. UN proper shippir	ng 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

09/03/2017 EN (English) 9/20



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

ADR	IMDG	IATA	RID
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

Special provisions (ADR) 375

Transport by sea
 No data available

- Air transport

Special provisions (IATA) A197

- Rail transport

Carriage prohibited (RID) No

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

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content 4.3 % (DIN EN ISO 11890-2)

15.1.2. National regulations

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Org. Perox. B	Organic Peroxides, Type B
Skin Sens. 1	Sensitisation — Skin, Category 1
H241	Heating may cause a fire or explosion

09/03/2017 EN (English) 10/20



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

H317	May cause an allergic skin reaction	
H319	Causes serious eye irritation	
H400	Very toxic to aquatic life	

SDS_EU_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

09/03/2017 EN (English) 11/20



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 22/02/2017 Revision date: 09/01/2017 Version: 1.0

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

1.1. Product identifier

Product form Mixture HIT-1, A Name Product code **BU** Anchor

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

1.2.1. Relevant identified uses

No additional information available

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Department issuing data specification sheet Supplier

Hilti AG Hilti Entwicklungsgesellschaft mbH Hiltistraße 6

Feldkircherstraße 100

9494 Schaan - Liechtenstein 86916 Kaufering - Deutschland

T +423 234 2111 - F +423 234 2965 T +49 8191 906310 - F +49 8191 90176310

anchor.hse@hilti.com www.hilti.com

1.4. Emergency telephone number

Emergency number Schweizerisches Toxikologisches Informationszentrum - 24h Service

+41 44 251 51 51 (international)

+423 234 2111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Eye Irrit. 2 Skin Sens. 1 H317

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

2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP) Warning

Hazardous ingredients 1,4-Butanediol dimethacrylate; ethylenedimethacrylate; 1,4-naphthoquinone

Hazard statements (CLP) H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation

Precautionary statements (CLP) 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

09/03/2017 12/20 EN (English)



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,4-Butanediol dimethacrylate	(CAS No) 2082-81-7 (EC No) 218-218-1 (REACH-no) 01-2119967415-30	10 - 15	Skin Sens. 1B, H317
vinyItoluene	(CAS No) 25013-15-4 (EC No) 246-562-2 (REACH-no) 01-2119622074-50	5 - 10	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Asp. Tox. 1, H304
ethylenedimethacrylate	(CAS No) 97-90-5 (EC No) 202-617-2 (EC Index No) 607-114-00-5	1 - 5	STOT SE 3, H335 Skin Sens. 1, H317
2-Hydroxypropyl methacrylate	(CAS No) 27813-02-1 (EC No) 248-666-3 (EC Index No) 607-125-00-5 (REACH-no) 01-2119490226-37	1 - 5	Eye Irrit. 2, H319 Skin Sens. 1, H317
2,2'-[(4-methylphenyl)imino]bisethanol	(CAS No) 3077-12-1 (EC No) 221-359-1	1 - 3	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318
1,1'-(p-tolylimino)dipropan-2-ol	(CAS No) 38668-48-3 (EC No) 254-075-1 (REACH-no) 01-2119980937-17	< 1	Acute Tox. 2 (Oral), H300 Eye Irrit. 2, H319 Aguatic Chronic 3, H412

Specific concentration limits:

Name	Product identifier	Specific concentration limits
ethylenedimethacrylate	(CAS No) 97-90-5 (EC No) 202-617-2 (EC Index No) 607-114-00-5	(C >= 10) 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

or rash occurs: Get medical advice/attention.

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

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.

09/03/2017 EN (English) 13/20



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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. 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

Hazardous decomposition products in case of

ire

Thermal decomposition generates : Carbon dioxide. Carbon monoxide.

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.

09/03/2017 EN (English) 14/20



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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 conditionsKeep cool. Protect from sunlight.Incompatible productsStrong bases. Strong acids.Incompatible materialsSources of ignition. Direct sunlight.

Storage temperature 5 - 25 °C

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

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

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

Туре	Material	Permeation	Thickness (mm)	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	> 0,4	EN 374

Eye protection Chemical goggles or safety glasses

Туре	Use	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166, EN 170

Skin and body protection Wear suitable protective clothing

Respiratory protection In case of inadequate ventilation wear respiratory protection

Device	Filter type	Condition	Standard
Disposable half mask	Filter A1/B1	Vapour protection	







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.

09/03/2017 EN (English) 15/20



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Solid

Appearance Thixotropic paste.

Colour Beige.

Odour strong. unpleasant odour.

Odour threshold No data available pΗ No data available Relative evaporation rate (butylacetate=1) No data available No data available Melting point Freezing point No data available No data available **Boiling point** No data available Flash point Auto-ignition temperature No data available Decomposition temperature No data available Flammability (solid, gas) No data available Vapour pressure No data available No data available Relative vapour density at 20 °C Relative density No data available Solubility insoluble in water. Log Pow No data available Viscosity, kinematic No data available No data available Viscosity, dynamic Explosive properties No data available Oxidising properties No data available

9.2. Other information

VOC content 2.8 mg/l (DIN EN ISO 11890-2)

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Explosive limits

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.

09/03/2017 EN (English) 16/20



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity Not classified

1,4-Butanediol dimethacrylate (2082-81-7)	
LD50 oral rat	10066 mg/kg
LD50 dermal rat	> 3000 mg/kg
vinyltoluene (25013-15-4)	
LD50 oral rat	2000-5000,Rat; Experimental value
LD50 dermal rabbit	2000-5000,Rabbit; Experimental value; Other
ethylenedimethacrylate (97-90-5)	
LD50 oral rat	8700 mg/kg (Rat; Other; Literature study)
LD50 dermal rat	> 2000 mg/kg bodyweight (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)
2,2'-[(4-methylphenyl)imino]bisethanol (3077)	-12-1)
LD50 oral rat	960 mg/kg (Rat; Literature study)
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)dipropan-2-ol (38668-48-3)	
LD50 oral rat	25 mg/kg
LD50 dermal rat	> 2000 mg/kg
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
Reproductive toxicity	Not classified
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration hazard	Not classified

SECTION 12: Ecological information

12.1. Toxicity

1,4-Butanediol dimethacrylate (2082-8	:1-7)
LC50 fish 1	32.5 mg/l
LC50 other aquatic organisms 1	9.79 mg/l
NOEC (acute)	7.51 mg/l
NOEC (chronic)	20 mg/l
vinyltoluene (25013-15-4)	
EC50 Daphnia 1	1.3 mg/l (LC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 18 h; Daphnia magna; Static system; Fresh water; Experimental value)
NOEC (acute)	5.2 mg/kg
NOEC (chronic)	1.636 mg/l
Threshold limit algae 1	2.6 mg/l (EC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)
ethylenedimethacrylate (97-90-5)	
LC50 fish 2	15.95 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Danio rerio; Static system)
Threshold limit algae 1	19 mg/l (ErC50; OECD 201: Alga, Growth Inhibition Test; 96 h; Pseudokirchneriella subcapitata; Static system)
2,2'-[(4-methylphenyl)imino]bisethano	ol (3077-12-1)
LC50 fish 1	> 100 mg/l (LC50; 96 h; Brachydanio rerio)

09/03/2017 EN (English) 17/20



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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)dipropan-2-ol (38668-48-3)		
1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)		
1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3) LC50 fish 1	≈ 17 mg/l	
, , , , , , , , , , , , , , , , , , , ,	≈ 17 mg/l 245 mg/l	
LC50 fish 1	ŭ	

12.2. Persistence and degradability

1,4-Butanediol dimethacrylate (2082-81-7)		
Biodegradation	84 %	
vinyltoluene (25013-15-4)		
Persistence and degradability	Not readily biodegradable in water. Forming sediments in water. No (test)data on mobility of the substance available. Photodegradation in the air.	
Biochemical oxygen demand (BOD)	0 g O ₂ /g substance	
Chemical oxygen demand (COD)	2.88 g O₂/g substance	
ThOD	3.12 g O₂/g substance	
BOD (% of ThOD)	0	
ethylenedimethacrylate (97-90-5)		
Persistence and degradability	Readily biodegradable in water. No significant hydrolysis. Adsorbs into the soil. Photolysis in the air. Ozonation in the air.	
2,2'-[(4-methylphenyl)imino]bisethanol (3077-12-1)		
Persistence and degradability	Biodegradability in water: no data available. No (test)data on mobility of the substance available. Photolysis in the air.	
2-Hydroxypropyl methacrylate (27813-02	2-1)	
Persistence and degradability	Readily biodegradable in water.	

12.3. Bioaccumulative potential

1,4-Butanediol dimethacrylate (2082-81-7)			
Log Pow	3.1		
vinyltoluene (25013-15-4)			
BCF fish 1	120 - 170 (BCF; Other; 30 days; Lepomis macrochirus; Flow-through system; Fresh water; Experimental value)		
Log Pow	3.26 - 3.36 (Experimental value; 25 °C)		
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).		
ethylenedimethacrylate (97-90-5)			
BCF other aquatic organisms 1	2.96 (BCF; BCFBAF v3.00)		
Log Pow	2.4 (Experimental value; OECD 102: Melting Point/Melting Range)		
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).		
2,2'-[(4-methylphenyl)imino]bisethanol (3077	7-12-1)		
Log Pow	1.09 (Experimental value)		
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).		
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)dipropan-2-ol (38668-48-3)			
BCF fish 1	≈		
Log Kow	2.1		

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

09/03/2017 EN (English) 18/20



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

12.6. Other adverse effects

No additional information available

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.

European List of Waste (LoW) code 08 04 09* - waste adhesives and sealants containing organic solvents or other dangerous

substances

SECTION 14: Transport information

In accordance with ADR / IATA / IMDG / RID

Other information No supplementary information available

ADR	IMDG	IATA	RID
14.1. UN number			
Not regulated for transport			
14.2. UN proper shipping nan	ne		
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		·	<u> </u>
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

09/03/2017 EN (English) 19/20



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions Contains no substance on the REACH candidate list Contains no REACH Annex XIV substances

VOC content

2.8 mg/l (DIN EN ISO 11890-2)

15.1.2. National regulations

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:

Acute Tox. 2 (Oral)	Acute toxicity (oral), Category 2
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, Category 1
Skin Sens. 1B	Sensitisation — Skin, category 1B
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H226	Flammable liquid and vapour
H300	Fatal if swallowed
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H412	Harmful to aquatic life with long lasting effects

SDS_EU_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

09/03/2017 EN (English) 20/20