HIT-1

Safety information for 2-Component-products

Issue date: 11/08/2022 Revision date: 11/08/2022 Supersedes: 22/02/2017 Version: 2.0

SECTION 1: Kit identification

1.1 Product identifier

Product name	HIT-1
Product code	BU Anchor

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

Hilti (Gt. Britain) Ltd.
1 Circle Square
3 Symphony Park
M1 7FS Manchester - Great Britain
T +44 161 886 1000
0800 886 100 Toll-free - F +44 161 872 1240
gbsales@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
Aquatic Chronic 1	H410

Full text of H- and EUH-statements: see section 16

Label elements

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

Hazard pictograms (CLP)

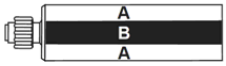
GHS07 GHS09

Signal word (CLP)	Warning
Hazardous ingredients	methacrylates, dibenzoyl peroxide
Hazard statements (CLP)	H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H410 - Very toxic to aquatic life with long lasting effects.

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.
Extra phrases	

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)	Skin Sens. 1, H317 Aquatic Chronic 3, H412
HIT-1, B		1	pcs (pieces)	Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

SECTION 4: General information

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 Get medical advice/attention. Do not induce vomiting

	Obtain emergency medical attention
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	May cause severe irritation
Symptoms/effects 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-1, B

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878
Issue date: 11/08/2022 Revision date: 11/08/2022 Supersedes version of: 22/02/2017 Version: 2.0

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

1.1. Product identifier

Product form	Mixture
Product 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
Hilti (Gt. Britain) Ltd.
1 Circle Square
3 Symphony Park
M1 7FS Manchester - Great Britain
T +44 161 886 1000
0800 886 100 Toll-free - F +44 161 872 1240
gbsales@hilti.com

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: Schweizerisches Toxikologisches Informationszentrum – 24h Service
+41 44 251 51 51 (international)
+44 161 886 1000
0800 886 100 Toll-free

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	NHS Direct (England and Wales) NHS 24 (Scotland)		111	

SECTION 2 Hazards identification

2.1. Classification of the substance or mixture

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

Serious eye damage/eye irritation, Category 2	H319
Skin sensitisation, Category 1	H317
Hazardous to the aquatic environment – Acute Hazard, Category 1	H400
Hazardous to the aquatic environment – Chronic Hazard, Category 1	H410

Full text of H- and EUH-statements: see section 16

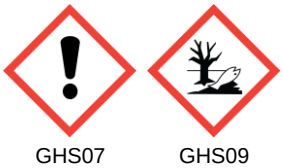
Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP)



GHS07 GHS09

Signal word (CLP)	Warning
Contains	dibenzoyl peroxide
Hazard statements (CLP)	H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H410 - Very toxic to aquatic life with long lasting effects.
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

Component	
dibenzoyl peroxide (94-36-0)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

Component	
dibenzoyl peroxide(94-36-0)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
dibenzoyl peroxide substance with national workplace exposure limit(s) (GB)	CAS-No. 94-36-0 EC-No. 202-327-6 EC Index-No. 617-008-00-0 REACH-no 01-2119511472-50	5 – <15	Org. Perox. B, H241 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)

Full text of H- and EUH-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. 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 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
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

8.1.1. National occupational exposure and biological limit values

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

HIT-1, B	
United Kingdom - Occupational Exposure Limits	
Local name	Dibenzoyl peroxide
WEL TWA (OEL TWA) [1]	5 mg/m³
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

dibenzoyl peroxide (94-36-0)	
United Kingdom - Occupational Exposure Limits	
Local name	Dibenzoyl peroxide
WEL TWA (OEL TWA) [1]	5 mg/m³
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls

Ensure adequate ventilation.

8.2.2. Personal protection equipment

Personal protective equipment

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

Personal protective equipment symbol(s)

8.2.2.1. Eye and face protection

Eye protection
Wear security glasses which protect from splashes

Eye protection:

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

8.2.2.2. Skin protection

Skin and body protection
Wear suitable 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.

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

8.2.2.3. Respiratory protection

No additional information available

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

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.

No additional information available

SECTION 9 Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid
Colour	Black.
Appearance	Thixotropic paste.
Odour	Not available
Odour threshold	Not available
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Flammability	Not available
Explosive limits	Not applicable
Lower explosive limit (LEL)	Not applicable
Upper explosive limit (UEL)	Not applicable
Flash point	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not available
pH	Not available

pH solution	Not available
Viscosity, kinematic	Not applicable
Solubility	Not available
Partition coefficient n-octanol/water (Log Kow)	Not available
Vapour pressure	Not available
Vapour pressure at 50 °C	Not available
Density	1.59 g/cm³
Relative density	Not available
Relative vapour density at 20 °C	Not applicable
Particle size	Not available
Particle size distribution	Not available
Particle shape	Not available
Particle aspect ratio	Not available
Particle aggregation state	Not available
Particle agglomeration state	Not available
Particle specific surface area	Not available
Particle dustiness	Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

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 hazard classes as defined in Regulation (EC) No 1272/2008

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

dibenzoyl peroxide (94-36-0)	
IARC group	3 - Not classifiable
Reproductive toxicity	Not classified
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and symptoms	No additional information available

SECTION 12 Ecological information

12.1. Toxicity

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

dibenzoyl peroxide (94-36-0)	
LC50 - Fish [2]	0.0602 mg/l (96h; Oncorhynchus mykiss; ECHA)
EC50 - Crustacea [1]	0.11 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
ErC50 algae	0.0711 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
NOEC (acute)	0.0316 mg/l (96h; Oncorhynchus mykiss; ECHA)
NOEC chronic fish	0.001 mg/l

12.2. Persistence and degradability

dibenzoyl peroxide (94-36-0)	
Persistence and degradability	Readily biodegradable in water. Not established. May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

dibenzoyl peroxide (94-36-0)	
Partition coefficient n-octanol/water (Log Pow)	3.71
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).

12.4. Mobility in soil

dibenzoyl peroxide (94-36-0)	
Surface tension	No data available (test not performed)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.8 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)
Ecology - soil	Low potential for mobility in soil.

12.5. Results of PBT and vPvB assessment

Component	
dibenzoyl peroxide (94-36-0)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

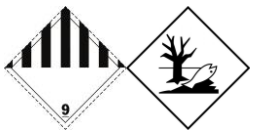
SECTION 13 Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	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.
European List of Waste (LoW) code	08 04 09* - waste adhesives and sealants containing organic solvents or other dangerous substances 20 01 27* - paint, inks, adhesives and resins containing dangerous substances

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID

ADR	IMDG	IATA	RID
14.1. UN number or ID number			
UN 3077	UN 3077	UN 3077	UN 3077
14.2. UN proper shipping name			
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide)	Environmentally hazardous substance, solid, n.o.s. (dibenzoyl peroxide)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide)
Transport document description			
UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide), 9, III, (-)	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide), 9, III, MARINE POLLUTANT	UN 3077 Environmentally hazardous substance, solid, n.o.s. (dibenzoyl peroxide), 9, III	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide), 9, III
14.3. Transport hazard class(es)			
9	9	9	9
			
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
not restricted according ADR Special Provision SP375, IATA-DGR Special Provision A197 and IMDG-Code 2.10.2.7			

14.6. Special precautions for user

Overland transport

Classification code (ADR)	:	M7
Special provisions (ADR)	:	274, 335, 375, 601
Limited quantities (ADR)	:	5kg
Packing instructions (ADR)	:	P002, IBC08, LP02, R001
Mixed packing provisions (ADR)	:	MP10
Transport category (ADR)	:	3
Orange plates	:	
Tunnel restriction code (ADR)	:	-
EAC code	:	2Z

Transport by sea

Special provisions (IMDG)	:	274, 335, 966, 967, 969
Limited quantities (IMDG)	:	5 kg
Packing instructions (IMDG)	:	LP02, P002
EmS-No. (Fire)	:	F-A
EmS-No. (Spillage)	:	S-F
Stowage category (IMDG)	:	A
Stowage and handling (IMDG)	:	SW23

Air transport

PCA packing instructions (IATA)	:	956
PCA max net quantity (IATA)	:	400kg
CAO packing instructions (IATA)	:	956
Special provisions (IATA)	:	A97, A158, A179, A197, A215

Rail transport

Special provisions (RID)	:	274, 335, 375, 601
Limited quantities (RID)	:	5kg
Packing instructions (RID)	:	P002, IBC08, LP02, R001

14.7. Maritime transport in bulk according to IMO instruments

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
Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.
Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants
VOC content 4.3 % (DIN EN ISO 11890-2)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16 Other information

Indication of changes:

Section	Changed item	Change	Comments
	SDS EU format according to COMMISSION REGULATION (EU) 2020/878	Modified	
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Added	
2.2	UFI	Added	
2.2	Hazard statements (CLP)	Modified	
3	Composition/information on ingredients	Modified	
13.1	European List of Waste (LoW) code	Added	
14	Transport information	Added	

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

Full text of H- and EUH-statements:	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H241	Heating may cause a fire or explosion.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
Org. Perox. B	Organic Peroxides, Type B
Skin Sens. 1	Skin sensitisation, Category 1

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]		
Eye Irrit. 2	H319	Calculation method
Skin Sens. 1	H317	Calculation method
Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 1	H410	Calculation method

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.

HIT-1, A

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878
Issue date: 11/08/2022 Revision date: 11/08/2022 Supersedes version of: 22/02/2017 Version: 2.0

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

1.1. Product identifier

Product form	Mixture
Product name	HIT-1, A
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
Hilti (Gt. Britain) Ltd.
1 Circle Square
3 Symphony Park
M1 7FS Manchester - Great Britain
T +44 161 886 1000
0800 886 100 Toll-free - F +44 161 872 1240
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1.4. Emergency telephone number

Emergency number: Schweizerisches Toxikologisches Informationszentrum – 24h Service
+41 44 251 51 51 (international)
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0800 886 100 Toll-free

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	NHS Direct (England and Wales) NHS 24 (Scotland)		111	

SECTION 2 Hazards identification

2.1. Classification of the substance or mixture

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

Skin sensitisation, Category 1	H317
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP)

GHS07

Signal word (CLP): Warning

Contains	2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester, ethylenedimethacrylate, stabilized, 2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol, Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol, 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-
Hazard statements (CLP)	H317 - May cause an allergic skin reaction. H412 - Harmful to aquatic life with long lasting effects.
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.
UFI	6HU0-U08J-8516-E4WW

2.3. Other hazards

Component	
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
vinyltoluene (25013-15-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
ethylenedimethacrylate, stabilized (97-90-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol, 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
2,2,4-trimethyl-1,3-pentanedioldiisobutyrate (6846-50-0)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
1,4-naphthoquinone (130-15-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

Component	
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester(2082-81-7)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

Component	
vinyltoluene(25013-15-4)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605
ethylenedimethacrylate, stabilized(97-90-5)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol(27813-02-1)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605
1,1'-(p-tolylimino)dipropan-2-ol(38668-48-3)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605
Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol, 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605
2,2,4-trimethyl-1,3-pentanedioldiisobutyrate(6846-50-0)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605
1,4-naphthoquinone(130-15-4)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester	CAS-No. 2082-81-7 EC-No. 218-218-1 REACH-no 01-2119967415-30	5 – <15	Skin Sens. 1B, H317
vinyltoluene	CAS-No. 25013-15-4 EC-No. 246-562-2 REACH-no 01-2119622074-50	1 – <6	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
ethylenedimethacrylate, stabilized	CAS-No. 97-90-5 EC-No. 202-617-2 EC Index-No. 607-114-00-5	1 – <5	Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Chronic 3, H412
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol	CAS-No. 27813-02-1 EC-No. 248-666-3 EC Index-No. 607-125-00-5 REACH-no 01-2119490226-37	< 2.5	Eye Irrit. 2, H319 Skin Sens. 1, H317

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,1'-(p-tolylimino)dipropan-2-ol	CAS-No. 38668-48-3 EC-No. 254-075-1 REACH-no 01-2119980937-17	< 0.5	Acute Tox. 2 (Oral), H300 (ATE=25 mg/kg bodyweight) Eye Irrit. 2, H319 Aquatic Chronic 3, H412
Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol, 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-	EC-No. 911-490-9 REACH-no 01-2119979579-10	< 0.5	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412
2,2,4-trimethyl-1,3-pentanedioldiisobutyrate	CAS-No. 6846-50-0 EC-No. 229-934-9	< 0.5	Repr. 2, H361 Aquatic Chronic 3, H412
1,4-naphthoquinone	CAS-No. 130-15-4 EC-No. 204-977-6	< 0.05	Acute Tox. 3 (Oral), H301 (ATE=124 mg/kg bodyweight) Acute Tox. 1 (Inhalation), H330 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410

Specific concentration limits:

Name	Product identifier	Specific concentration limits
ethylenedimethacrylate, stabilized	CAS-No. 97-90-5 EC-No. 202-617-2 EC Index-No. 607-114-00-5	(10 ≤C < 100) STOT SE 3, H335

Full text of H- and EUH-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. 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 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
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

8.1.1. National occupational exposure and biological limit values

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

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls

Ensure adequate ventilation.

8.2.2. Personal protection equipment

Personal protective equipment

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

Personal protective equipment symbol(s)

8.2.2.1. Eye and face protection

Eye protection

Wear security glasses which protect from splashes

Eye protection:

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

8.2.2.2. Skin protection

Skin and body protection

Wear suitable 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.

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

8.2.2.3. Respiratory protection

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

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

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

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.

No additional information available

SECTION 9 Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid
Colour	Beige.
Appearance	Thixotropic paste.
Odour	strong. unpleasant odour.
Odour threshold	Not available
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Flammability	Not available
Explosive limits	Not applicable
Lower explosive limit (LEL)	Not applicable
Upper explosive limit (UEL)	Not applicable
Flash point	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not available
pH	Not available
pH solution	Not available
Viscosity, kinematic	Not applicable
Solubility	insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	Not available
Vapour pressure	Not available
Vapour pressure at 50 °C	Not available
Density	1.72 g/cm³
Relative density	Not available
Relative vapour density at 20 °C	Not applicable
Particle size	Not available
Particle size distribution	Not available
Particle shape	Not available
Particle aspect ratio	Not available
Particle aggregation state	Not available
Particle agglomeration state	Not available
Particle specific surface area	Not available
Particle dustiness	Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

VOC content 2.8 % (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 hazard classes as defined in Regulation (EC) No 1272/2008

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

2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	
LD50 oral rat	10066 mg/kg
LD50 dermal rat	> 3000 mg/kg
ATE CLP (oral)	10066 mg/kg bodyweight

vinyltoluene (25013-15-4)	
LD50 oral rat	3375 mg/kg bodyweight (Rat, Male, Experimental value, Oral, 14 day(s))
LD50 oral	4000 mg/kg
LD50 dermal rabbit	> 4585 mg/kg bodyweight (24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 16.891 mg/l (4 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))
ATE CLP (oral)	3375 mg/kg bodyweight
ATE CLP (gases)	4500 ppmv/4h
ATE CLP (vapours)	11 mg/l/4h
ATE CLP (dust,mist)	1.5 mg/l/4h

ethylenedimethacrylate, stabilized (97-90-5)	
LD50 oral rat	8700 mg/kg (Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
ATE CLP (oral)	8700 mg/kg bodyweight

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; >=2000 mg/kg bodyweight; Rat; Experimental value)

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
LD50 dermal rabbit	≥ 5000 mg/kg bodyweight (Rabbit; Experimental value)

2,2,4-trimethyl-1,3-pentanedioldiisobutyrate (6846-50-0)	
LD50 oral rat	> 2000 mg/kg bodyweight (OECD 425: Acute Oral Toxicity: Up-and-Down Procedure, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))

Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol, 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-	
ATE CLP (oral)	500 mg/kg bodyweight

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

1,4-naphthoquinone (130-15-4)	
LD50 oral rat	124 mg/kg (Rat; Experimental value)
ATE CLP (oral)	124 mg/kg bodyweight
ATE CLP (gases)	10 ppmv/4h
ATE CLP (vapours)	0.05 mg/l/4h
ATE CLP (dust,mist)	0.005 mg/l/4h

Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Not classified
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
STOT-single exposure	Not classified

ethylenedimethacrylate, stabilized (97-90-5)	
STOT-single exposure	May cause respiratory irritation.

1,4-naphthoquinone (130-15-4)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure	Not classified
Aspiration hazard	Not classified

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and symptoms	No additional information available

SECTION 12 Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short–term (acute)	Not classified
Hazardous to the aquatic environment, long–term (chronic)	Harmful to aquatic life with long lasting effects.

2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	
LC50 - Other aquatic organisms [1]	9.79 mg/l
NOEC (acute)	7.51 mg/l
NOEC (chronic)	20 mg/l

vinyltoluene (25013-15-4)	
ErC50 algae	4.3 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value)
NOEC (acute)	5.2 mg/kg

vinyltoluene (25013-15-4)	
NOEC (chronic)	1.636 mg/l
ethylenedimethacrylate, stabilized (97-90-5)	
LC50 - Fish [1]	15.95 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Static system, Experimental value, GLP)
EC50 - Crustacea [1]	44.9 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Experimental value, GLP)
ErC50 algae	19 mg/l (OECD 201: Alga, Growth Inhibition Test, 96 h, Pseudokirchneriella subcapitata, Static system, Experimental value, GLP)
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 - Crustacea [1]	> 143 mg/l (48 h; Daphnia magna; GLP)
ErC50 algae	97.2 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, 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)
2,2,4-trimethyl-1,3-pentanedioldiisobutyrate (6846-50-0)	
EC50 - Crustacea [1]	> 1.46 mg/l (Equivalent or similar to EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Greater than the water solubility)
ErC50 algae	> 7.49 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Greater than the water solubility)
1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)	
LC50 - Fish [1]	≈ 17 mg/l
LC50 - Other aquatic organisms [1]	245 mg/l
EC50 - Crustacea [1]	28.8 mg/l
NOEC (acute)	57.8 mg/l

12.2. Persistence and degradability

2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	
Biodegradation	84 %
vinyltoluene (25013-15-4)	
Persistence and degradability	Not readily biodegradable in water.
Biochemical oxygen demand (BOD)	0 g O_2/g substance
Chemical oxygen demand (COD)	2.88 g O_2/g substance
ThOD	3.12 g O_2/g substance
BOD (% of ThOD)	0
ethylenedimethacrylate, stabilized (97-90-5)	
Persistence and degradability	Readily biodegradable in water.
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
Persistence and degradability	Readily biodegradable in water.
2,2,4-trimethyl-1,3-pentanedioldiisobutyrate (6846-50-0)	
Persistence and degradability	Readily biodegradable in water.
ThOD	2.4 g O_2/g substance
1,4-naphthoquinone (130-15-4)	
Persistence and degradability	Biodegradability in soil: no data available.
Biochemical oxygen demand (BOD)	0.81 g O_2/g substance
ThOD	2.125 g O_2/g substance
BOD (% of ThOD)	0.381

12.3. Bioaccumulative potential

2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	
Partition coefficient n-octanol/water (Log Pow)	3.1
vinyltoluene (25013-15-4)	
BCF - Fish [1]	120 – 170 (Other, 30 day(s), Lepomis macrochirus, Flow-through system, Fresh water, Experimental value)

vinyltoluene (25013-15-4)	
Partition coefficient n-octanol/water (Log Pow)	3.26 – 3.36 (Experimental value, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
ethylenedimethacrylate, stabilized (97-90-5)	
BCF - Other aquatic organisms [1]	2.96 (BCFBAF v3.00, QSAR)
Partition coefficient n-octanol/water (Log Pow)	2.4 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
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)
Partition coefficient n-octanol/water (Log Pow)	0.97 (OECD 102 method)
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500).
2,2,4-trimethyl-1,3-pentanedioldiisobutyrate (6846-50-0)	
BCF - Fish [1]	5340 (OECD 305: Bioconcentration: Flow-Through Fish Test, 23 day(s), Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, GLP)
Partition coefficient n-octanol/water (Log Pow)	4.04 – 4.91 (QSAR, 25 °C)
Bioaccumulative potential	High potential for bioaccumulation (BCF > 5000).
1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)	
Partition coefficient n-octanol/water (Log Kow)	2.1
1,4-naphthoquinone (130-15-4)	
Partition coefficient n-octanol/water (Log Pow)	1.71 – 1.78
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

vinyltoluene (25013-15-4)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.985 (log Koc, SRC PCKOCWIN v2.0, QSAR)
Ecology - soil	Low potential for adsorption in soil.
ethylenedimethacrylate, stabilized (97-90-5)	
Surface tension	No data available (test not performed)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.367 – 2.12 (log Koc, SRC PCKOCWIN v2.0, QSAR)
Ecology - soil	Highly mobile in soil.
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.9 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.
2,2,4-trimethyl-1,3-pentanedioldiisobutyrate (6846-50-0)	
Surface tension	27.8 mN/m (22 °C, 100 vol %, EU Method A.5: Surface tension)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.6 (log Koc, QSAR)
Ecology - soil	Low potential for mobility in soil.

12.5. Results of PBT and vPvB assessment

Component	
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
vinyltoluene (25013-15-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
ethylenedimethacrylate, stabilized (97-90-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Component	
Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol, 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
2,2,4-trimethyl-1,3-pentanedioldiisobutyrate (6846-50-0)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
1,4-naphthoquinone (130-15-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

No additional information available

12.7. 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.
Product/Packaging disposal recommendations	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.
European List of Waste (LoW) code	08 04 09* - waste adhesives and sealants containing organic solvents or other dangerous substances 20 01 27* - paint, inks, adhesives and resins containing dangerous substances

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID

ADR	IMDG	IATA	RID
14.1. UN number or ID number			
Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name			
Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group			
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards			
Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available			

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport
Not regulated

Rail transport
Not regulated

14.7. Maritime transport in bulk according to IMO instruments

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
Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.
Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants
VOC content 2.8 % (DIN EN ISO 11890-2)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16 Other information

Indication of changes:

Section	Changed item	Change	Comments
	SDS EU format according to COMMISSION REGULATION (EU) 2020/878	Modified	
1.2	Use of the substance/mixture	Added	
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Modified	
2.2	UFI	Added	
2.2	Hazard statements (CLP)	Modified	
3.2	Composition/information on ingredients	Modified	
13.1	European List of Waste (LoW) code	Added	

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

Abbreviations and acronyms	
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

Full text of H- and EUH-statements:	
Acute Tox. 1 (Inhalation)	Acute toxicity (inhal.), Category 1
Acute Tox. 2 (Oral)	Acute toxicity (oral), Category 2
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
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
H226	Flammable liquid and vapour.
H300	Fatal if swallowed.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H361	Suspected of damaging fertility or the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Repr. 2	Reproductive toxicity, Category 2
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]		
Skin Sens. 1	H317	Calculation method
Aquatic Chronic 3	H412	Calculation method

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.