

Safety information for 2-Component-products

Date of issue: 19/12/2018

Revision date: 19/12/2018

Supersedes: 19/12/2017

Version: 7.3

SECTION 1: Kit identification

1.1 Product identifier

Product name Product code HIT-HY 150 MAX BU Anchor



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

Hilti Deutschland AG Hiltistr. 2 86916 Kaufering - Deutschland T +49 8191 90-0 - F +49 8191 90-1122 de.kundenservice@hilti.com

SECTION 2: General information

Storage

Storage temperature : 5 - 25 °C

Germany

Reference to AwSV

Storage class (LGK)

Water hazard class (WGK) nwg, Non-hazardous to water (Classification according to AwSV, Annex 1) LGK 11 - Combustible solids

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. 2H319Skin Sens. 1H317Aquatic Acute 1H400Aquatic Chronic 1H410

Full text of H statements : see section 16

Label elements

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

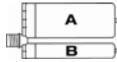


Kit Safety Information Sheet

Hazard pictograms (CLP)	GHS07 GHS09
Signal word (CLP)	Warning
Hazardous ingredients	methacrylates, dibenzoyl peroxide
6	
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.

Additional information

2-Component-foilpack, contains: Component A: Urethane methacrylate resin, inorganic filler Component B: Dibenzoyl peroxide, phlegmatized



Name	General description	Quantity	Unit	Classification according to Regulation (EC) No. 1272/2008 [CLP]
HIT-HY 150 MAX, A		1	pcs (pieces)	Eye Irrit. 2, H319 Skin Sens. 1, H317
HIT-HY 150 MAX, B		1	pcs (pieces)	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	
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

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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 Do NOT induce vomiting. Obtain emergency medical attention
First-aid measures after inhalation	Assure fresh air breathing Remove person to fresh air and keep comfortable for breathing. Allow the victim to rest
First-aid measures after skin contact	Wash with plenty of water/ If skin irritation or rash occurs: Get immediate medical advice/attention. Get medical advice/attention. Wash contaminated clothing before reuse.
First-aid measures general	Take off immediately all contaminated clothing. Never give anything by mouth to an unconscious person If you feel unwell, seek medical advice (show the label where possible)
Symptoms/effects after eye contact	Causes serious eye irritation.
Symptoms/effects after skin contact	May cause an allergic skin reaction.

SECTION 7: Fire fighting measures	
Firefighting instructions	Use water spray or fog for cooling exposed containers Exercise caution when fighting any chemical fire Prevent fire fighting water from entering the environment
Protection during firefighting	Self-contained breathing apparatus Do not enter fire area without proper protective equipment, including respiratory protection
Hazardous decomposition products in case of fire	Thermal decomposition generates : Carbon dioxide Carbon monoxide

SECTION 8: Other information

No data available



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 19/12/2018

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

1.1. Product identifier

Product form Product name Product code

Mixture HIT-HY 150 MAX, B **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 Use of the substance/mixture

For professional use only 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 Deutschland AG Hiltistr. 2 86916 Kaufering - Deutschland T +49 8191 90-0 - F +49 8191 90-1122 de.kundenservice@hilti.com

Department issuing data specification sheet Hilti Entwicklungsgesellschaft mbH Hiltistraße 6 86916 Kaufering - Deutschland T +49 8191 906310 - F +49 8191 90176310 anchor.hse@hilti.com

1.4. Emergency telephone number

Emergency number

Schweizerisches Toxikologisches Informationszentrum - 24h Service +41 44 251 51 51 (international) +49 8191 90-0

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 - Acute Hazard, Category 1 H400 Hazardous to the aquatic environment - Chronic Hazard, Category 1 H410

Full text of H 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)



Signal word (CLP) Hazardous ingredients

dibenzoyl peroxide



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

Hazard statements (CLP)	H317 - May cause an allergic skin reaction. 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

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

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	(CAS-No.) 94-36-0 (EC-No.) 202-327-6 (EC Index-No.) 617-008-00-0 (REACH-no) 01-2119511472-50	5 - 10	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-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. Assure fresh air breathing. 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.

Rinse mouth. Drink plenty of water. Get medical advice/attention. Do not induce vomiting.

First-aid measures after ingestion

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.	

Obtain emergency medical attention.



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

Treat symptomatically.

SECTION 5: Firefighting measure	S	
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 relea	se measures		
6.1. Personal precautions, protectiv	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 st	orage
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.



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7.2. Conditions for safe storage, including any incompatibilities		
Storage conditions	Keep cool. Protect from sunlight.	

Incompatible products Incompatible materials Storage temperature Heat and ignition sources Strong bases. Strong acids. Sources of ignition. Direct sunlight. 5 - 25 °C 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

dibenzoyl peroxide (94-36-0		
Germany	TRGS 900 Local name	Dibenzoylperoxid
Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	5 mg/m ³ (E)
Germany	TRGS 900 Remark	DFG

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

Hand protection

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

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
Encounter the NA and a second to descent a state of the second second				

Eye protection Wear security glasses which protect from splashes

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

Skin and body protection



Wear suitable protective clothing

Environmental exposure controls

Consumer exposure controls

Other information

Avoid release to the environment.

Avoid contact during pregnancy/while nursing.

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Appearance Colour Odour Odour threshold

Solid Thixotropic paste. white. characteristic. Not determined



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рН	≈ 6
Relative evaporation rate (butylacetate=1)	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Auto-ignition temperature	Not self-igniting
Decomposition temperature	65 °C SADT
Flammability (solid, gas)	Non flammable.
Vapour pressure	No data available
Relative vapour density at 20 °C	No data available
Relative density	No data available
Density	2 g/ml DIN 66137-2
Solubility	Water: Not miscible
Log Pow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	70 Pa·s HN-0333
Explosive properties	Product is not explosive.
Oxidising properties	No data available
Explosive limits	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

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



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Skin corrosion/irritation	Not classified
	pH: ≈ 6
Additional information	Based on available data, the classification criteria are not met
Serious eye damage/irritation	Not classified
	pH: ≈ 6
Additional information	Based on available data, the classification criteria are not met
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
	Based on available data, the classification criteria are not met
Reproductive toxicity	Not classified
Additional information	Based on available data, the classification criteria are not met
STOT-single exposure	Not classified
Additional information	Based on available data, the classification criteria are not met
STOT-repeated exposure	Not classified
Additional information	Based on available data, the classification criteria are not met
Aspiration hazard	Not classified
Additional information	Based on available data, the classification criteria are not met
HIT-HY 150 MAX, B	
Viscosity, kinematic	35000 mm²/s
Detected a decision because the altheory of the state and	Description of the later that the state of the time of the state of th

Potential adverse human health effects and symptoms

Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity	
Acute aquatic toxicity	Very toxic to aquatic life.
Chronic aquatic toxicity	Very toxic to aquatic life with long lasting effects.

dibenzoyl peroxide (94-36-0)		
EC50 Daphnia 1	0,11 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static	
	system, Fresh water, Experimental value)	
LC50 fish 2	0,0602 mg/l (96h; Oncorhynchus mykiss; ECHA)	
NOEC (acute)	0,0316 mg/l (96h; Oncorhynchus mykiss; ECHA)	
NOEC chronic fish	< 0,001	

12.2. Persistence and degradability	
HIT-HY 150 MAX, B	
Persistence and degradability	Not established.
dibenzoyl peroxide (94-36-0)	
Persistence and degradability	Readily biodegradable in water. Not established. May cause long-term adverse effects in the
	environment.

12.5. Bioaccumulative potential	
HIT-HY 150 MAX, B	
Bioaccumulative potential	Not established.
dibenzoyl peroxide (94-36-0)	
Log Pow	3,71
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).

12.4. Mobility in soil

dibenzoyl peroxide (94-36-0)	
Log Koc	3,8 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage



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	Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)			
Ecology - soil	Adsorbs into the soil.			
12.5. Results of PBT and vPvB assessment				

HIT-HY 150 MAX, B				
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				
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. Other adverse effects

Additional information

Avoid release to the environment.

SECTION 13: Disposal considerations

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

Other information

not restricted according ADR Special Provision SP375, IATA-DGR Special Provision A197 and IMDG-Code 2.10.2.7

ADR Regulatory status: Not regulated IMDG Regulatory status: Not regulated IATA Regulatory status: Not regulated RID Regulatory status: Not regulated

ADR	IMDG	ΙΑΤΑ	RID	
14.1. UN number				
Not regulated	Not regulated	Not regulated	Not regulated	
14.2. UN proper shipping n	ame			
Not regulated	Not regulated	Not regulated	Not regulated	
14.3. Transport hazard clas	14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated	
Not applicable	Not applicable	Not applicable	Not applicable	
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	
Environmentally hazardous substances derogation applies (quantity of liquids ≤ 5 litres or net mass of solids ≤ 5 kg)				
not restricted according ADR Special Provision SP375, IATA-DGR Special Provision A197 and IMDG-Code 2.10.2.7				



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- 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

15.1.2. National regulations

Germany	
Reference to AwSV	Water hazard class (WGK) awg, Hazardous to water in general (Classification according to AwSV, Annex 1)
Storage class (LGK)	LGK 11 - Combustible solids
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Section	Changed item	Change	Comments
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Added	
2.2	Hazard statements (CLP)	Modified	
3	Composition/informatio n on ingredients	Modified	

Other information

12 ...

None.

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



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Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Org. Perox. B	Organic Peroxides, Type B	
Skin Sens. 1	Skin sensitisation, Category 1	
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.	

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



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 19/12/2018

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Version: 7.2

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

1.1. Product identifier	
Product form	Mixture
Product name	HIT-HY 150 MAX, A
Product code	BU Anchor
1.2. Relevant identified uses of the sul	ostance or mixture and uses advised against
1.2.1. Relevant identified uses	
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 safet	y data sheet
Supplier Hilti Deutschland AG Hiltistr. 2 86916 Kaufering - Deutschland T +49 8191 90-0 - F +49 8191 90-1122 de.kundenservice@hilti.com	Department issuing data specification sheet Hilti Entwicklungsgesellschaft mbH Hiltistraße 6 86916 Kaufering - Deutschland T +49 8191 906310 - F +49 8191 90176310 anchor.hse@hilti.com
1.4. Emergency telephone number	
Emergency number	Schweizerisches Toxikologisches Informationszentrum – 24h Service +41 44 251 51 51 (international) +49 8191 90-0
SECTION 2: Hazards identificat 2.1. Classification of the substance	

Classification according to Regulation (EC) No. 1272/2008 [CLP] Serious eye damage/eye irritation, Category 2 Skin sensitisation, Category 1

Full text of H statements : see section 16

H319 H317

Adverse physicochemical, human health and environmental effects No additional information available

2.2. Label elements

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

Signal word (CLP) Hazardous ingredients

Hazard statements (CLP)

GHS07 Warning 2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester; 4-tert-butylpyrocatechol; 2-Propenoic acid, 2methyl-, monoester with 1,2-propanediol H317 - May cause an allergic skin reaction.



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

	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. 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

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

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-, 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	5 - 10	Eye Irrit. 2, H319 Skin Sens. 1, H317
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 - 10	Skin Sens. 1B, H317
1,1,1-Trimethylolpropane trimethacrylate	(CAS-No.) 3290-92-4 (EC-No.) 221-950-4 (REACH-no) 01-2119542176-41	1 - 3	Aquatic Chronic 2, H411
1,1'-(p-tolylimino)dipropan-2-ol	(CAS-No.) 38668-48-3 (EC-No.) 254-075-1 (REACH-no) 01-2119980937-17	1 - 3	Acute Tox. 2 (Oral), H300 Eye Irrit. 2, H319 Aquatic Chronic 3, H412
boric acid substance listed as REACH Candidate	(CAS-No.) 10043-35-3 (EC-No.) 233-139-2 (EC Index-No.) 005-007-00-2	0 - 1	Repr. 1B, H360FD
4-tert-butylpyrocatechol	(CAS-No.) 98-29-3 (EC-No.) 202-653-9	0 - 1	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 2, H411

Name	Product identifier	Specific concentration limits
boric acid	(CAS-No.) 10043-35-3 (EC-No.) 233-139-2 (EC Index-No.) 005-007-00-2	(C >= 5,5) Repr. 1B, H360FD

Full text of H-statements: see section 16



Safety Data Sheet

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

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)
4.2. Most important symptoms and eff	ects, 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 medic	cal attention and special treatment needed
Treat symptomatically.	
SECTION 5: Firefighting measu	ires
5.1. Extinguishing media	
No additional information available	
5.2. Special hazards arising from the s	substance or mixture
No additional information available	
5.3. Advice for firefighters	
Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any
	chemical fire. Prevent fire fighting water from entering the environment.
	chemical fire. Prevent fire fighting water from entering the environment.
SECTION 6: Accidental release	chemical fire. Prevent fire fighting water from entering the environment.
SECTION 6: Accidental release 6.1. Personal precautions, protective e	chemical fire. Prevent fire fighting water from entering the environment.
SECTION 6: Accidental release 6.1. Personal precautions, protective e General measures	chemical fire. Prevent fire fighting water from entering the environment. measures equipment and emergency procedures
SECTION 6: Accidental release 6.1. Personal precautions, protective e General measures	chemical fire. Prevent fire fighting water from entering the environment. measures equipment and emergency procedures
SECTION 6: Accidental release 6.1. Personal precautions, protective e General measures 6.1.1. For non-emergency personnel Emergency procedures	chemical fire. Prevent fire fighting water from entering the environment.
SECTION 6: Accidental release 6.1. Personal precautions, protective e General measures 6.1.1. For non-emergency personnel Emergency procedures 6.1.2. For emergency responders	chemical fire. Prevent fire fighting water from entering the environment.
SECTION 6: Accidental release 6.1. Personal precautions, protective e General measures 6.1.1. For non-emergency personnel Emergency procedures 6.1.2. For emergency responders Emergency procedures	chemical fire. Prevent fire fighting water from entering the environment.
SECTION 6: Accidental release 6.1. Personal precautions, protective e General measures 6.1.1. For non-emergency personnel	chemical fire. Prevent fire fighting water from entering the environment.
SECTION 6: Accidental release 6.1. Personal precautions, protective e General measures 6.1.1. For non-emergency personnel Emergency procedures 6.1.2. For emergency responders Emergency procedures 6.2. Environmental precautions No additional information available 6.3. Methods and material for containr	chemical fire. Prevent fire fighting water from entering the environment.
SECTION 6: Accidental release 6.1. Personal precautions, protective e General measures 6.1.1. For non-emergency personnel Emergency procedures 6.1.2. For emergency responders Emergency procedures 6.2. Environmental precautions No additional information available 6.3. Methods and material for containr	chemical fire. Prevent fire fighting water from entering the environment.
SECTION 6: Accidental release 6.1. Personal precautions, protective e General measures 6.1.1. For non-emergency personnel Emergency procedures 6.1.2. For emergency responders Emergency procedures 6.2. Environmental precautions No additional information available 6.3. Methods and material for containn No additional information available	chemical fire. Prevent fire fighting water from entering the environment.
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SECTION 6: Accidental release 6.1. Personal precautions, protective e General measures 6.1.1. For non-emergency personnel Emergency procedures 6.1.2. For emergency responders Emergency procedures 6.2. Environmental precautions No additional information available 6.3. Methods and material for containn No additional information available 6.4. Reference to other sections No additional information available	chemical fire. Prevent fire fighting water from entering the environment.

7.2. Conditions for safe storage, including any incompatibilities

Incompatible products

Strong bases. Strong acids.



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Incompatible materials	Sources of ignition. Direct sunlight.
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

boric acid (10043-35-3)		
Germany	TRGS 900 Local name	BorsäureundNatriumborate
Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	0,5 mg/m³
Germany	TRGS 900 Remark	AGS,Y,10

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

Hand protection

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

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 Wear security glasses which protect from splashes				

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

Skin and body protection



Environmental exposure controls

Consumer exposure controls

Other information

Wear suitable protective clothing

Avoid release to the environment.

Avoid contact during pregnancy/while nursing.

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid
Appearance	Thixotropic paste.
Colour	Light grey.
Odour	characteristic.
Odour threshold	Not determined
рН	No data available
Relative evaporation rate (butylacetate=1)	No data available
Melting point	No data available
Freezing point	No data available



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Boiling point	No data available
Flash point	> 109 °C DIN EN ISO 1523
Auto-ignition temperature	Not self-igniting
Decomposition temperature	No data available
Flammability (solid, gas)	Non flammable.
Vapour pressure	No data available
Relative vapour density at 20 °C	No data available
Relative density	No data available
Density	1,74 g/cm3 DIN 66137-2
Solubility	Water: Not miscible
Log Pow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	70 HN-0333
Explosive properties	Product is not explosive.
Oxidising properties	No data available
Explosive limits	No data available

9.2. Other information

No additional information available

10.1. Reactivity	
No additional information available	
10.2. Chemical stability	
No additional information available	
10.3. Possibility of hazardous reactions	
No additional information available	
10.4. Conditions to avoid	
No additional information available	
10.5. Incompatible materials	
Strong acids. Strong bases.	
10.6. Hazardous decomposition products	
No additional information available	

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

boric acid (10043-35-3)	
LD50 oral rat	2660 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; >2600 mg/kg bodyweight;
	Rat; Experimental value)
LD50 oral	2660 mg/kg



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LD50 dermal rabbit	> 2000 mg/kg Rabbit; Experimental value; FIFRA (40 CFR)		
LC50 inhalation rat (mg/l)	> 2,12 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male/female, Experimental value, Inhalation (dust))		
1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)			
LD50 oral rat	25 mg/kg		
LD50 dermal rat	> 2000 mg/kg		
2-Propenoic acid, 2-methyl-, 1,4-butanediyl			
LD50 oral rat	10066 mg/kg		
LD50 dermal rat	> 3000 mg/kg		
4-tert-butylpyrocatechol (98-29-3)	Q4E as after the description (Det. Lettert EQUA)		
LD50 oral rat LD50 oral	815 mg/kg bodyweight (Rat; Lethal; ECHA) 2820 mg/kg		
LD50 dermal rat	1331 mg/kg bodyweight (Rat;Lethal; ECHA)		
LD50 dermal	630 mg/kg		
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)		
LD50 dermal rabbit	>= 5000 mg/kg bodyweight (Rabbit; Experimental value)		
1,1,1-Trimethylolpropane trimethacrylate (32	290-92-4)		
LD50 oral rat	> 5000 mg/kg		
LD50 dermal rat	> 3000 mg/kg		
Skin corrosion/irritation	Not classified		
Additional information	Based on available data, the classification criteria are not met		
Serious eye damage/irritation	Causes serious eye irritation.		
Additional information	Based on available data, the classification criteria are not met		
Respiratory or skin sensitisation	May cause an allergic skin reaction.		
Germ cell mutagenicity	Not classified		
	Based on available data, the classification criteria are not met		
Reproductive toxicity	Not classified		
Additional information	Based on available data, the classification criteria are not met		
STOT-single exposure	Not classified		
Additional information	Based on available data, the classification criteria are not met		
STOT-repeated exposure	Not classified		
Additional information	Based on available data, the classification criteria are not met		
Aspiration hazard	Not classified		
Additional information	Based on available data, the classification criteria are not met		
Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.		

SECTION 12: Ecological information

12.1. Toxicity	
Acute aquatic toxicity	Not classified
Chronic aquatic toxicity	Not classified

boric acid (10043-35-3)		
LC50 fish 1	447 mg/l	
EC50 Daphnia 1	658 - 875 mg/l (48 h; Daphnia magna)	
LC50 fish 2	79 ppm (96 h; Salmo gairdneri (Oncorhynchus mykiss); Hard water)	
EC50 Daphnia 2	19,7 mg/l (336 h; Daphnia magna)	
ErC50 (algae)	290 mg/l	
NOEC chronic fish	2,1 mg/l	
1,1'-(p-tolylimino)dipropan-2-ol (38668-	48-3)	
LC50 fish 1	≈ 17 mg/l	
LC50 other aquatic organisms 1	245 mg/l	



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EC50 Daphnia 1	28,8 mg/l			
NOEC (acute)	57,8 mg/l			
2-Propenoic acid, 2-methyl-, 1,4-butanediyl e	2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)			
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			
4-tert-butylpyrocatechol (98-29-3)				
LC50 fish 1	0,12 mg/l (96 h, Danio rerio, Lethal, ECHA)			
EC50 Daphnia 1	> µg/l			
ErC50 (algae)	10,17 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, 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 Daphnia 1	> 143 mg/l (48 h; Daphnia magna; GLP)			
Threshold limit algae 1	> 97,2 mg/l (72 h; Pseudokirchneriella subcapitata; GLP)			
Threshold limit algae 2	> 97,2 mg/l (72 h; Pseudokirchneriella subcapitata; GLP)			
1,1,1-Trimethylolpropane trimethacrylate (3290-92-4)				
LC50 fish 1	2 mg/l			
ErC50 (algae)	3,88 mg/l			
NOEC chronic fish	0,138 mg/l			
NOEC chronic crustacea	0,177 mg/l			

12.2. Persistence and degradability

HIT-HY 150 MAX, A		
Persistence and degradability	Not established.	
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)		
Biodegradation	84 %	
4-tert-butylpyrocatechol (98-29-3)		
Persistence and degradability	Not readily biodegradable in water. Inherently biodegradable.	
ThOD	2,4 g O ₂ /g substance	
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)		
Persistence and degradability	Readily biodegradable in water.	

12.3. Bioaccumulative potential

HIT-HY 150 MAX, A	
Bioaccumulative potential	Not established.
boric acid (10043-35-3)	
BCF fish 2	< 0,1 (60 days; Oncorhynchus tshawytscha; Fresh weight)
Log Pow	-1,09 (Experimental value; EU Method A.8: Partition Coefficient; 22 °C)
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500).
1,1'-(p-tolylimino)dipropan-2-ol (38668-48-	-3)
BCF fish 1	*
Log Kow	2,1
2-Propenoic acid, 2-methyl-, 1,4-butanedi	yl ester (2082-81-7)
Log Pow	3,1
4-tert-butylpyrocatechol (98-29-3)	
Log Pow	1,98 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
2-Propenoic acid, 2-methyl-, monoester w	vith 1,2-propanediol (27813-02-1)
BCF fish 1	<= 100
BCF fish 2	3,2 Quantitative structure-activity relationship (QSAR)
Log Pow	0,97 (OECD 102 method)
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500).
1,1,1-Trimethylolpropane trimethacrylate	(3290-92-4)
BCF fish 2	366 l/kg
Log Pow	3,53
Log Kow	4,39



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12.4. Mobility in soil

boric acid (10043-35-3)			
Ecology - soil	No (test)data on mobility of the substance available. May be harmful to plant growth, blooming and fruit formation.		
4-tert-butylpyrocatechol (98-29-3)	4-tert-butylpyrocatechol (98-29-3)		
Log Koc	1,37 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)		
Ecology - soil	Highly mobile in soil.		
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)			
Ecology - soil	Low potential for adsorption in soil.		

12.5. Results of PBT and vPvB assessment

HIT-HY 150 MAX, A			
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			
boric acid (10043-35-3)	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		
4-tert-butylpyrocatechol (98-29-3)	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		
2-Propenoic acid, 2-methyl-, monoester with	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII		
1,2-propanediol (27813-02-1)	This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII		

12.6. Other adverse effects

Additional information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

No additional information available

SECTION 14: Transport information

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

Other information

not restricted according ADR Special Provision SP375, IATA-DGR Special Provision A197 and IMDG-Code 2.10.2.7 $\,$

ADR Regulatory status: Not regulated IMDG Regulatory status: Not regulated IATA Regulatory status: Not regulated RID Regulatory status: Not regulated

ADR	IMDG	ΙΑΤΑ	RID		
14.1. UN number	14.1. UN number				
Not regulated	Not regulated	Not regulated	Not regulated		
14.2. UN proper shipping r	name				
Not regulated	Not regulated	Not regulated	Not regulated		
14.3. Transport hazard class(es)					
Not regulated	Not regulated	Not regulated	Not regulated		
Not applicable	Not applicable	Not applicable	Not applicable		
14.4. Packing group					
Not regulated	Not regulated	Not regulated	Not regulated		



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ADR	IMDG	ΙΑΤΑ	RID
14.5. Environmental hazar	ds		
Not regulated	Not regulated	Not regulated	Not regulated
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	
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 a substance on the REACH candidate list in concentration \geq 0.1% or with a lower specific limit: Boric acid (EC 233-139-2, CAS 10043-35-3)

Contains no REACH Annex XIV substances

15.1.2. National regulations

Germany

Reference to AwSV

Storage class (LGK) 12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV Water hazard class (WGK) awg, Hazardous to water in general (Classification according to AwSV, Annex 1) LGK 11 - Combustible solids Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Other information

None.

Full text of H- and EUH-statements:

Acute Tox. 2 (Oral)	Acute toxicity (oral), Category 2
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1



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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 Irrit. 2	Serious eye damage/eye irritation, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
H300	Fatal if swallowed.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H360FD	May damage fertility. May damage the unborn child.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
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