

HVU M8 - M39

依据标准 : GB/T 16483, GB/T 17519-2013

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Supersedes:2017/11/13

SECTION 1 Chemical product and company identification

Product identifier

Product form Mixture
 Generic name HVU M8 - M39
 Product code BU Anchor
 Chemical name Adhesive Capsule HVU



Details of the supplier of the safety data sheet

Supplier	Department issuing data specification sheet
Hilti (China) Ltd.	Hilti Entwicklungsgesellschaft mbH
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Pudong District	86916 Kaufering - Deutschland
200120 Shanghai - China	T +49 8191 906876
T T+21 60167001	anchor.hse@hilti.com
800-820-2585 (Toll Free)	
cncs@hilti.com	

Emergency telephone number

Emergency number Schweizerisches Toxikologisches Informationszentrum - 24h Service
 +41 44 251 51 51 (international)
 +86 21 6016 7320
 800-820-2585 (Toll Free)

Country	Organisation/Company	Address	Emergency number
China	chemical accident emergency consultation service hotline (24/7)		400-6267-911

SECTION 2: Hazards identification

Emergency overview

foil capsule. resin: yellowish liquid
 hardener: white powder. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Use personal protective equipment as required. Equip cleanup crew with proper protection

GHS classification

Health hazards Skin sensitisation, Category 1
 Reproductive toxicity, Category 1B
 Environmental hazards Hazardous to the aquatic environment — Acute Hazard, Category 2
 Hazardous to the aquatic environment — Chronic Hazard, Category 2
 Other hazards not mentioned above are Not applicable or No data is available.

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GHS CN labelling

Hazard pictograms (GHS CN)



GHS07

GHS08

GHS09

Signal word (GHS CN)

Danger

Hazard statements (GHS CN)

H317 - May cause an allergic skin reaction.

H360 - May damage the unborn child..

H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (GHS CN)

P262 - Do not get in eyes, on skin, or on clothing, P280 - Wear eye protection, protective clothing, protective gloves, P302+P352 - IF ON SKIN: Wash with plenty of water, P333+P313 - If skin irritation or rash occurs: Get medical advice/attention, P337+P313 - If eye irritation persists: Get medical advice/attention, P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing, P410+P403 - Protect from sunlight. Store in a well-ventilated place, P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

Additional information

SECTION 3: Composition/information on ingredients

Product form

Mixture

Name	CAS-No.	Concentration (%)
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol	27813-02-1	5 - 10
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester	2082-81-7	5 - 10
dibenzoyl peroxide	94-36-0	1 - 2.5
dicyclohexyl phthalate	84-61-7	1 - 2.5
1,1'-(p-tolylimino)dipropan-2-ol	38668-48-3	0.1 - 1

SECTION 4: First aid measures

Emergency

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).

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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.
First-aid measures after ingestion	Rinse mouth. Drink plenty of water. Get medical advice/attention. Do not induce vomiting. Obtain emergency medical attention.

Most Important Symptoms/Effects

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

Personal Protection in First Aid and Measures

Avoid all unnecessary exposure.

Notes for the doctor

Other medical advice or treatment	Treat symptomatically
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SECTION 5 Fire fighting measures

Extinguishing media

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

Special hazard

Hazardous decomposition products in case of fire	Thermal decomposition generates : Carbon dioxide Carbon monoxide
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Advice for firefighters and protective 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

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SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Heat and ignition sources Keep away from heat and direct sunlight
General measures Spilled material may present a slipping hazard

For non-emergency personnel

Emergency procedures Evacuate unnecessary personnel.

For emergency responders

Protective equipment Use personal protective equipment as required. Equip cleanup crew with proper protection.
Emergency procedures Ventilate area.

Environmental precautions

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

Methods and Equipment for Containment and Cleaning up

For containment Collect spillage.

Prevention Measures for Secondary Accidents

Other information Dispose of materials or solid residues at an authorized site

SECTION 7 Handling and storage

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.

Storage

Storage conditions Keep cool. Protect from sunlight.
Expiry date: See date printed on box and capsule. Do not use if expiry date has been exceeded!
Incompatible products Strong bases. Strong acids.
Incompatible materials Sources of ignition. Direct sunlight.

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Storage temperature 5 - 25 ° C
 Heat and ignition sources Keep away from heat and direct sunlight

SECTION 8: Exposure controls / Personal protection equipment

Occupational Exposure Limits

dibenzoyl peroxide	
Local name	过氧化苯甲酰 # Benzoyl peroxide
OEL TWA	5 mg/m ³

Biological limit values

No additional information available

Monitoring methods

Personal protective equipment

Personal protective equipment Safety glasses
 Gloves
 Protective clothing
 Avoid all unnecessary exposure
 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

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 374.

Eye protection Wear security glasses which protect from splashes

Type	Use	Characteristics	Standard
Safety glasses.	Droplet.	clear.	EN 166, EN 170.

Skin and body protection Wear suitable protective clothing



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SECTION 9 Physical and chemical properties

Physical state	Solid
Appearance	foil capsule
Colour	resin: yellowish liquid hardener: white powder
Odour	characteristic
Odour threshold (ppm)	No data available
Odour threshold (mg/m ³)	No data available
pH	No data available
pH solution	No data available
Relative evaporation rate (butylacetate=1)	No data available
Relative evaporation rate (ether=1)	No data available
Evaporation rate	No data available
Other properties	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	> 101 ° C (DIN EN ISO 1523)
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Critical temperature	No data available
Vapour pressure	0.1 hPa
Vapour pressure at 50 ° C	No data available
Critical pressure	No data available
Relative vapour density at 20 ° C	No data available
Relative density	No data available
Relative density of saturated gas/air mixture	No data available
Density	No data available
Relative gas density	No data available
Solubility	insoluble in water.
Solubility in water	No data available
Solubility in ethanol	No data available
Solubility in ether	No data available
Solubility in acetone	No data available
Solubility in organic solvents	No data available
Log Pow	No data available
Log Kow	No data available
Viscosity, kinematic	20 Seconds (ISO 2431)
Explosive limits (g/m ³)	No data available
Explosive limits (vol %)	No data available

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Lower explosive limit (LEL)	No data available
Upper explosive limit (UEL)	No data available
Radioactive	No

SECTION 10: Stability and reactivity

Chemical stability	Stable under normal conditions
Possibility of hazardous reactions	No additional information available
Conditions to avoid	Direct sunlight. Extremely high or low temperatures
Incompatible materials	Strong acids Strong bases
Hazardous decomposition products	fume Carbon monoxide Carbon dioxide Under normal conditions of storage and use, hazardous decomposition products should not be produced

SECTION 11: Toxicological information

Acute toxicity

Acute toxicity (oral)	No data available
Acute toxicity (dermal)	No data available
Acute toxicity (inhalation)	No data available

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol	
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)
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester	
LD50 oral rat	10066 mg/kg
LD50 dermal rat	> 3000 mg/kg
ATE CN (oral)	10066 mg/kg bodyweight
1,1'-(p-tolylimino)dipropan-2-ol	
LD50 oral rat	25 mg/kg
LD50 dermal rat	> 2000 mg/kg
ATE CN (oral)	25 mg/kg bodyweight
dicyclohexyl phthalate	
LD50 oral rat	41400 mg/kg (Rat)
LD50 dermal rabbit	> 7940 mg/kg (Rabbit)
ATE CN (oral)	41400 mg/kg bodyweight

Skin corrosion/irritation

Skin corrosion/irritation	No data available
pH	

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Serious eye damage/irritation

Serious eye damage/irritation Not classified

Respiratory or skin sensitisation

Respiratory or skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

Germ cell mutagenicity No data available

Carcinogenicity

Carcinogenicity No data available

Reproductive toxicity

Reproductive toxicity May damage the unborn child..

STOT-single exposure

STOT-single exposure No data available

STOT-repeated exposure

STOT-repeated exposure No data available

Aspiration hazard

Aspiration hazard No data available

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Human evidence for classification	No
Not able to form a pool	No
Hydrocarbon	No
Aliphatic, alicyclic or aromatic hydrocarbon	No
Polycyclic-aromatic hydrocarbons	No
Viscosity, kinematic	20 Seconds (ISO 2431)

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SECTION 12: Ecological information

Toxicity

Acute aquatic toxicity Toxic to aquatic life.
Chronic aquatic toxicity Toxic to aquatic life with long lasting effects.

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol	
LC50 fish 1	493 mg/l (48 h; Leuciscus idus; GLP)
EC50 Daphnia 1	> 143 mg/l (48 h; Daphnia magna; GLP)
BCF fish 1	<= 100
BCF fish 2	3.2 Quantitative structure-activity relationship (QSAR)

2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester	
LC50 fish 1	32.5 mg/l

1,1'-(p-tolylimino)dipropan-2-ol	
LC50 fish 1	≈ 17 mg/l
EC50 Daphnia 1	28.8 mg/l
BCF fish 1	≈
Log Kow	2.1

dibenzoyl peroxide	
LC50 fish 2	0.0602 mg/l (96h; Oncorhynchus mykiss; ECHA)
EC50 Daphnia 1	0.11 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)
NOEC chronic fish	< 0.001

dicyclohexyl phthalate	
LC50 fish 1	> 10000 mg/l (96 h; Brachydanio rerio; Static system)
NOEC chronic crustacea	0.181 mg/l
BCF fish 1	640 (Pisces)

Persistence and degradability

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Not rapidly degradable	No

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol	
Not rapidly degradable	Yes
Persistence and degradability	Readily biodegradable in water

2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester	
Not rapidly degradable	Yes
Biodegradation	84 %

1,1'-(p-tolylimino)dipropan-2-ol	
Not rapidly degradable	No

dibenzoyl peroxide	
Not rapidly degradable	No

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Persistence and degradability	Readily biodegradable in water Not established May cause long-term adverse effects in the environment
dicyclohexyl phthalate	
Not rapidly degradable	No
Persistence and degradability	Readily biodegradable in water Forming sediments in water
ThOD	2.376 g O ₂ /g substance

Bioaccumulative potential

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol	
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500)
BCF fish 1	See section 12.1 on ecotoxicology
BCF fish 2	See section 12.1 on ecotoxicology
Log Pow	0.97 (OECD 102 method)
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester	
Log Pow	3.1
1,1'-(p-tolylimino)dipropan-2-ol	
BCF fish 1	See section 12.1 on ecotoxicology
Log Kow	See section 12.1 on ecotoxicology
dibenzoyl peroxide	
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4)
Log Pow	3.71
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)
dicyclohexyl phthalate	
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5)
BCF fish 1	See section 12.1 on ecotoxicology
Log Pow	3 - 6.2

Mobility in soil

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol	
Ecology - soil	Low bioaccumulation potential (BCF < 500)
Log Pow	0.97 (OECD 102 method)
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester	
Log Pow	3.1
1,1'-(p-tolylimino)dipropan-2-ol	
Log Kow	See section 12.1 on ecotoxicology
dibenzoyl peroxide	
Ecology - soil	Low bioaccumulation potential (Log Kow < 4)

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Log Pow	3.71
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)
dicyclohexyl phthalate	
Ecology - soil	High potential for bioaccumulation (Log Kow > 5)
Log Pow	3 - 6.2

Other adverse effects

Classification procedure (Ozone) No data available

Results of PBT and vPvB assessment

PBT This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

vPvB This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 13: Disposal considerations

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.

Regional legislation (waste) Disposal must be done according to official regulations

SECTION 14: Transport information

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

ADR	IMDG	IATA	RID
14.1. UN 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

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ADR	IMDG	IATA	RID
Environmentally hazardous substances derogation applies (quantity of liquids \leq 5 litres or net mass of solids \leq 5 kg)			
No supplementary information available			

Special precautions for user

- **Overland transport**

- **Transport by sea**

No data available

- **Air transport**

No data available

- **Rail transport**

Carriage prohibited (RID) No

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

SECTION 15: Regulatory information

Regulation on the Safety Management of Hazardous Chemicals	Catalogue of Hazardous Chemicals (2015) 874, Dibenzoylperoxide
Rules for dangerous goods transport by railway	List of dangerous goods by railway (2009) 52045B
Dangerous Goods List (GB 12268-2012)	Not listed
Regulations on Labor Protection in Workplaces Where Toxic Substances Are Used	Not listed
Regulation of Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals	Not listed
Regulation of the People's Republic of China on the Administration of the Import and Export of Goods	Not listed
Regulation on the Control of Precursor Chemicals	Not listed
Measures for the Administration of Pharmaceutical Precursor Chemicals	Not listed

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Regulations on the Control of Agricultural Chemicals; Notice of Pesticide Transport	Not listed
Regulation on the Management of Controlled Chemicals	Not listed
Catalogue of Hazardous Chemicals (2015)	Not listed.
Major Hazard Installations for Dangerous Chemicals (GB 18218-2009)	Not listed.
Export Control List	Not listed.
Catalog of Toxic Chemicals Severely Restricted From Import and Export (2012)	Not listed.
List of Goods Prohibited from Export (No. 3) or Import (No. 6)	Not listed.
Drug Precursors	Not listed.
Pharmaceutical Precursor Chemicals	Not listed.
Controlled Chemicals Lists - Annex I & II	Not listed.
Hazardous Substances in Electronic Information Products (RoHS)	Not listed.
Ozone Depleting Substances Prohibited or Restricted for Production and Use	Not listed.
Ministry of Environmental Protection Announcement No. 23 of 2009 - Banned POPs	Not listed.

SECTION 16 Other information

Compiled according to GB/T 16483, GB/T 17519

Indication of changes

Section	Changed item	Change	Comments
2.	Classification (GHS CN).	Modified.	
2.	Hazard pictograms (GHS CN).	Added.	
2.	Hazard statements (GHS CN).	Added.	
2.	Precautionary statements (GHS CN).	Added.	

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product