

HVU M8 - M39

Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

Version: 9.1

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

1.1. Product identifier

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



Generic name HVU M8 - M39

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended uses and restrictions For professional users only
Recommended use Adhesive anchor capsule for anchor fastening in concrete

1.4. Supplier's details

Supplier

Hilti Far East Private Ltd.
No 20 Harbour Drive,
#06-06/08 PSA Vista
117612 Singapore - Singapur
T +65 6777 7887 - F +65 6777 3057
sg-customerservice@hilti.com

Department issuing data specification sheet

Hilti Entwicklungsgesellschaft mbH
Hiltistraße 6
86916 Kaufering - Deutschland
T +49 8191 906876
anchor.hse@hilti.com

1.5. Emergency telephone number

Emergency number Schweizerisches Toxikologisches Informationszentrum – 24h Service
+41 44 251 51 51 (international)
+65 6777 7887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Health hazards Skin sensitisation, Category 1
Reproductive toxicity, Category 1B
Environmental hazards Hazardous to the aquatic environment — Chronic Hazard, Category 2

2.2. Label elements

Hazard pictograms (GHS SG)



GHS07

GHS08

GHS09

Signal word (GHS SG)

Danger

Hazard statements (GHS SG)

H317 - May cause an allergic skin reaction.
H360D - May damage the unborn child.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

Wear eye protection, protective clothing, protective gloves. (P280)
Do not get in eyes, on skin, or on clothing. (P262)

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Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
If skin irritation or rash occurs: Get medical advice/attention. (P333+P313)
If eye irritation persists: Get medical advice/attention. (P337+P313)
IF ON SKIN: Wash with plenty of soap and water. (P302+P352)

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Concentration(%)	Formula	Product identifier
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol	5 - 10	C7H12O3	(CAS-No.) 27813-02-1 (EC-No.) 248-666-3 (EC Index-No.) 607-125-00-5
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester	5 - 10	C12H18O4	(CAS-No.) 2082-81-7 (EC-No.) 218-218-1 (EC Index-No.)
1,1'-(p-tolylimino)dipropan-2-ol	0.1 - 1	C13H21NO2	(CAS-No.) 38668-48-3 (EC-No.) 254-075-1 (EC Index-No.)
dibenzoyl peroxide	1 - 2.5	C14H10O4	(CAS-No.) 94-36-0 (EC-No.) 202-327-6 (EC Index-No.) 617-008-00-0
dicyclohexyl phthalate	1 - 2.5	C20H26O4	(CAS-No.) 84-61-7 (EC-No.) 201-545-9 (EC Index-No.)

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).

Inhalation

Remove person to fresh air and keep comfortable for breathing. Assure fresh air breathing. Allow the victim to rest.

Skin contact

Wash contaminated clothing before reuse. Wash with plenty of water/.... If skin irritation or rash occurs: Get medical advice/attention.

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.

Ingestion

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

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after skin contact

May cause an allergic skin reaction.

Symptoms/effects after eye contact

May cause severe irritation.

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

Treat symptomatically.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Special Protective actions for the fire fighters

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.
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6.1.1. For non-emergency personnel

Emergency procedures	Evacuate unnecessary personnel.
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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. 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.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Monitoring

No additional information available

8.3. Appropriate engineering controls

No additional information available

8.4. Personal protective equipment

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



Environmental exposure controls Avoid release to the environment.

Consumer exposure controls Avoid contact during pregnancy/while nursing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Solid
Appearance foil capsule.
Colour resin: yellowish liquid
hardener: white powder.
Odour characteristic.
Odour threshold No data available
pH No data available
Relative evaporation rate (butylacetate=1) No data available
Melting point No data available
Freezing point No data available
Boiling point No data available

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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
Vapour pressure	0.1 hPa
Relative vapour density at 20 °C	No data available
Relative density	No data available
Solubility	insoluble in water.
Log Pow	No data available
Viscosity, kinematic	20 Seconds (ISO 2431)
Viscosity, dynamic	No data available
Explosive properties	No data available
Oxidising properties	No data available
Explosive limits	No data available

9.2. Other information

SADT 55 °C dibenzoyl peroxide

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. Effects on humans

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

11.2. Acute toxicity

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Oral	Rat	LD ₅₀	No data available
	Mouse	LD ₅₀	No data available

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Inhalation	Rat	LC ₅₀	No data available
	Mouse	LC ₅₀	No data available
Dermal	Rabbit	LD ₅₀	No data available
	Mouse	LD ₅₀	No data available

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)			
Oral	Rat	LD ₅₀	> 5000 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; >=2000 mg/kg bodyweight; Rat; Experimental value)
Dermal	Rabbit	LD ₅₀	>= 5000 mg/kg bodyweight (Rabbit; Experimental value)

2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)			
Oral	Rat	LD ₅₀	10066 mg/kg

1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)			
Oral	Rat	LD ₅₀	25 mg/kg

dicyclohexyl phthalate (84-61-7)			
Oral	Rat	LD ₅₀	41400 mg/kg (Rat)
Dermal	Rabbit	LD ₅₀	> 7940 mg/kg (Rabbit)

11.3. Skin corrosion/irritation - Description

No data available

11.4. Serious eye damage/eye irritation - Description

No data available

11.5. Skin or Respiratory sensitization - Description

No data available

11.6. Germ cell mutagenicity - Description

No data available

11.7. Carcinogenicity - Description

No data available

11.8. Reproductive toxicity - Description

No data available

11.9. Specific target organ toxicity (single exposure) - Description

No data available

11.10. Specific target organ toxicity (repeated exposure) - Description

No data available

11.11. Aspiration hazard - Description

No data available

11.12. Other health hazard

No data available

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SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity	Not classified
Chronic aquatic toxicity	Toxic to aquatic life with long lasting effects.

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)
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
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 Daphnia 1	28.8 mg/l
NOEC (acute)	57.8 mg/l
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
dicyclohexyl phthalate (84-61-7)	
LC50 fish 1	> 10000 mg/l (96 h; Brachydanio rerio; Static system)
LC50 other aquatic organisms 1	1.04 mg/l
NOEC (acute)	> 2 mg/l
NOEC chronic crustacea	0.181 mg/l

12.2. Persistence and degradability

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
Persistence and degradability	Readily biodegradable in water.
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	
Biodegradation	84 %
dibenzoyl peroxide (94-36-0)	
Persistence and degradability	Readily biodegradable in water. Not established. May cause long-term adverse effects in the environment.
dicyclohexyl phthalate (84-61-7)	
Persistence and degradability	Readily biodegradable in water. Forming sediments in water.
ThOD	2.376 g O ₂ /g substance

12.3. Bioaccumulative potential

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)
Log Pow	0.97 (OECD 102 method)
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500).
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	
Log Pow	3.1
1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)	
BCF fish 1	≈
Log Kow	2.1
dibenzoyl peroxide (94-36-0)	
Log Pow	3.71

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Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).
dicyclohexyl phthalate (84-61-7)	
BCF fish 1	640 (Pisces)
Log Pow	3 - 6.2
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).

12.4. Mobility in soil

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
Ecology - soil	Low potential for adsorption 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 Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)
Ecology - soil	Adsorbs into the soil.

12.5. Results of PBT and vPvB assessment

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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	
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
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
dicyclohexyl phthalate (84-61-7)	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

12.6. Other adverse effects

Ozone	Not classified
Other adverse effects	No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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.
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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			

14.6. Special precautions for user

- Overland transport

- Transport by sea

No data available

- Air transport

No data available

- Rail transport

Carriage prohibited (RID)

No

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

SECTION 15: Regulatory information

15.1. National regulations

No data available

15.2. International Regulations

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

Skin Sens. 1 H317
 Repr. 1B H360D
 Aquatic Chronic 2 H411

Full text of H statements : see section 16

15.3. Chemical inventory status

No additional information available

SECTION 16: Other information

Other information None.

Acute Tox. 2 (Oral)	Acute toxicity (oral), Category 2
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 Irrit. 2	Serious eye damage/eye irritation, Category 2
Org. Perox. B	Organic Peroxides, Type B
Repr. 1B	Reproductive toxicity, Category 1B
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
H241	Heating may cause a fire or explosion.
H300	Fatal if swallowed.
H317	May cause an allergic skin reaction.

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H319	Causes serious eye irritation.
H360D	May damage 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.

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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