

Safety Data Sheet

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

Date of issue: 30/01/2019 Revision date: 30/01/2019 Supersedes: 11/12/2017 Version: 9.1

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

1.1. Product identifier

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



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

Use of the substance/mixture Adhesive anchor capsule for anchor fastening in concrete

1.3. Details of the supplier of the safety data sheet

Supplier

Hilti Emirates L.L.C.
Dubai Investment Park
P.O. Box 11051
Dubai - United Arab Emirates
T +971 800 44584 - F +971 4 885 4405
ae.contactus@hilti.com - www.hilti.ae

Department issuing data specification sheet

Department issuing data specifical 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)

+971 4 8019694

800-Hilti (44584) (Toll free)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

 Skin Sens. 1
 H317

 Repr. 1B
 H360

 Aquatic Acute 2
 H401

 Aquatic Chronic 2
 H411

Full text of H statements : see section 16

2.2. Label elements

Signal word (GHS UN)

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

Hazard pictograms (GHS UN)







GHS07

Danger

Hazardous ingredients 2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol; 2-Propenoic acid, 2-methyl-, 1,4-

butanediyl ester; dibenzoyl peroxide; dicyclohexyl phthalate

Hazard statements (GHS UN)

H317 - May cause an allergic skin reaction.

H360 - May damage fertility or the unborn child.

H360 - May damage fertility or the unborn child. H411 - Toxic to aquatic life with long lasting effects.

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Precautionary statements (GHS UN)

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.

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

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

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to the United Nations GHS |
|---|----------------------|---------|---|
| 2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol | (CAS-No.) 27813-02-1 | 5 - 10 | Flammable liquids Not classified Acute toxicity (oral) Not classified Serious eye damage/eye irritation, Category 2A, H319 Skin sensitisation, Category 1, H317 Hazardous to the aquatic environment - Acute Hazard Not classified Hazardous to the aquatic environment - Chronic Hazard Not classified |
| 2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester | (CAS-No.) 2082-81-7 | 5 - 10 | Acute toxicity (oral) Not classified Skin sensitisation, category 1B, H317 Hazardous to the aquatic environment — Acute Hazard, Category 3, H402 Hazardous to the aquatic environment — Chronic Hazard, Category 3, H412 |
| dibenzoyl peroxide | (CAS-No.) 94-36-0 | 1 - 2.5 | Organic Peroxides, Type B, H241 Serious eye damage/eye irritation, Category 2A, H319 Skin sensitisation, Category 1, H317 Hazardous to the aquatic environment — Acute Hazard, Category 1, H400 (M=10) Hazardous to the aquatic environment — Chronic Hazard, Category 1, H410 (M=10) |
| dicyclohexyl phthalate | (CAS-No.) 84-61-7 | 1 - 2.5 | Acute toxicity (oral) Not classified Acute toxicity (dermal) Not classified Skin sensitisation, Category 1, H317 Reproductive toxicity, Category 1B, H360 Hazardous to the aquatic environment - Acute Hazard Not classified Hazardous to the aquatic environment — Chronic Hazard, Category 3, H412 |
| 1,1'-(p-tolylimino)dipropan-2-ol | (CAS-No.) 38668-48-3 | 0.1 - 1 | Acute toxicity (oral), Category 2, H300 Serious eye damage/eye irritation, Category 2A, H319 Hazardous to the aquatic environment — Acute Hazard, Category 3, H402 Hazardous to the aquatic environment — Chronic Hazard, Category 3, H412 |

Full text of H-statements: see section 16

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SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation

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). 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.

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

No additional information available

5.3. Advice for firefighters

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.

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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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Hygiene measures

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.

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.

Storage temperature 5 - 25 °C

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering 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.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection Wear protective gloves. The permeation time is

not the maximum wearing time! Generally speaking, it must be reduced. Contact with either mixtures of substances or different substances may shorten the protective function's effective

duration.

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

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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







8.4. Exposure limit values for the other components

No additional information available

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 No data available

Flash point > 101 °C (DIN EN ISO 1523)

Auto-ignition temperature

Decomposition temperature

No data available

No data available

Flammability (solid, gas)

No data available

Vapour pressure 0.1 hPa

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

9.2. Other information

SADT 55 °C dibenzoyl peroxide

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

| 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) | | |
| 2-Propenoic acid, 2-methyl-, 1,4-buta | nediyl ester (2082-81-7) | | |
| LD50 oral rat | 10066 mg/kg | | |
| LD50 dermal rat | > 3000 mg/kg | | |
| 1,1'-(p-tolylimino)dipropan-2-ol (3866 | 8-48-3) | | |
| LD50 oral rat | 25 mg/kg | | |
| LD50 dermal rat | LD50 dermal rat > 2000 mg/kg | | |
| dicyclohexyl phthalate (84-61-7) | | | |
| LD50 oral rat | 41400 mg/kg (Rat) | | |
| LD50 dermal rabbit | > 7940 mg/kg (Rabbit) | | |
| Skin corrosion/irritation | Not classified | | |
| O and a constant of a constant of the constant | NI-A -land Cond | | |

Not classified Serious eye damage/irritation

Respiratory or skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity Not classified Not classified Carcinogenicity

Reproductive toxicity May damage fertility or the unborn child.

Not classified STOT-single exposure Not classified STOT-repeated exposure Aspiration hazard Not classified

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SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity

Toxic to aquatic life.

Classification procedure (Acute aquatic toxicity)

Calculation method

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

Classification procedure (Chronic aquatic Calculation method

toxicity)

| 2-Propenoic acid, 2-methyl-, monoeste | | |
|---|---|--|
| 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-butan | ediyl 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 | r-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 e | ster (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 O₂/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 | |

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| 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 | | |
| 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) | | | |
|--|---------------------------------------|-----------------------------------|--|
| Log Pow | See section 12.1 on ecotoxicology | | |
| Ecology - soil | Low potential for adsorption in soil. | | |
| 2-Propenoic acid, 2-methyl-, 1 | 4-butanediyl ester (2082-81-7) | | |
| Log Pow | See section 12.1 on ecotoxicology | | |
| 1,1'-(p-tolylimino)dipropan-2- | I (38668-48-3) | | |
| Log Kow | See section 12.1 on ecotoxicology | See section 12.1 on ecotoxicology | |
| dibenzoyl peroxide (94-36-0) | | | |
| Log Pow | See section 12.1 on ecotoxicology | | |
| Log Koc | See section 12.1 on ecotoxicology | | |
| Ecology - soil | Adsorbs into the soil. | Adsorbs into the soil. | |
| dicyclohexyl phthalate (84-61 | 7) | | |
| Log Pow | See section 12.1 on ecotoxicology | See section 12.1 on ecotoxicology | |

Other adverse effects 12.5.

Not classified Ozone

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 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.

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 | |

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| ADR | IMDG | IATA | RID | | |
|---|---------------------|---------------|---------------|--|--|
| 14.3. Transport hazard cla | iss(es) | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | | |
| 14.4. Packing group | 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) | | | | | |
| 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. Safety, health and environmental regulations/legislation specific for the substance or mixture

No additional information available

SECTION 16: Other information

 SDS Major/Minor
 None

 Date of issue
 30/01/2019

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 Supersedes
 11/12/2017

Indication of changes:

| Section | Changed item | Change | Comments |
|---------|--|----------|----------|
| 2.1 | Classification (GHS UN) | Modified | |
| 2.2 | Hazard pictograms (GHS UN) | Added | |
| 2.2 | Hazard statements (GHS UN) | Added | |
| 3 | Composition/information on ingredients | Modified | |

Other information None.

Full text of H-statements:

| H241 | Heating may cause a fire or explosion. |
|------|--|
| H300 | Fatal if swallowed. |

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| H317 | May cause an allergic skin reaction. |
|------|---|
| H319 | Causes serious eye irritation. |
| H360 | May damage fertility or the unborn child. |
| H400 | Very toxic to aquatic life. |
| H401 | Toxic to aquatic life |
| H402 | Harmful 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

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