

# HVU-TZ M10-M20

## Safety Data Sheet

According to Taiwan Ministry of Labour Lao-zhi Shou-tzu No. 10302007861, "Regulations for the Labeling and Hazard Communication of Hazardous Chemicals"

Date of issue: 2019/08/08 Revision date: 2019/08/08 Supersedes: 2019/01/24 Version: 14.2

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

#### Product identifier

Product form Mixture  
Generic name HVU-TZ M10-M20  
Product code BU Anchor



#### 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

#### Details of the supplier of the safety data sheet

##### Supplier

Hilti Taiwan Co., Ltd.  
24/F, No. 16, Xinzhan Road, Banqiao Dist.  
220 New Taipei City - Taiwan  
T +886 2 6630 0345;  
0800 221 036 Toll Free - F +886 2 2950 6132  
[twcs@hilti.com](mailto:twcs@hilti.com)

##### Department issuing data specification sheet

Hilti Entwicklungsgesellschaft mbH  
Hiltistraße 6  
86916 Kaufering - Deutschland  
T +49 8191 906876  
[anchor.hse@hilti.com](mailto:anchor.hse@hilti.com)

#### Emergency telephone number

Emergency number Schweizerisches Toxikologisches Informationszentrum - 24h Service  
+41 44 251 51 51 (international)  
+886 2 2357 9090  
0800 221 036 Toll Free

### SECTION 2: Hazards identification

#### Classification of the substance or mixture

##### GHS classification (Taiwan)

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.

#### Label elements

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

Hazard pictograms (GHS TW)



GHS07

GHS08

GHS09

Signal word (GHS TW)

Danger

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Hazard statements (GHS TW)	(H317) May cause an allergic skin reaction. (H360) May damage fertility or the unborn child. (H411) Toxic to aquatic life with long lasting effects.
Prevention precautionary statements	(P280) Wear eye protection, protective clothing, protective gloves. (P262) Do not get in eyes, on skin, or on clothing.
Response Precautionary Statements	(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/attention. (P337+P313) If eye irritation persists: Get medical advice/attention. (P302+P352) IF ON SKIN: Wash with plenty of Water.

### Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### Substances

Not applicable

### Mixtures

Name	Product identifier	Concentration
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (2-甲基-2-丙烯酸-1,2-丙二醇酯)	(CAS-No.) 27813-02-1	5 - 10
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2-甲基-2-丙烯酸(1,4-丁二醇)酯)	(CAS-No.) 2082-81-7	5 - 10
dibenzoyl peroxide (過氧化二苯甲醯)	(CAS-No.) 94-36-0	1 - 2.5
dicyclohexyl phthalate (鄰苯二甲酸二環己酯)	(CAS-No.) 84-61-7	1 - 2.5
1,1'-(p-tolylimino)dipropan-2-ol (1,1'-[(4-甲基苯基)亞氨基]二-2-丙醇)	(CAS-No.) 38668-48-3	0.1 - 1

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### First aid measures for different exposure routes

First-aid measures general	Take off immediately all contaminated clothing. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.



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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.

### Protection for the first aid staff

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

### Protection for the first aid staff

Personal Protection in First Aid and Measures	-
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### Notes to physician

No additional information available

## SECTION 5: Firefighting measures

### Extinguishing media

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

### Specific hazards arising from firefighting measures

### Specific firefighting methods

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
	-

### Special protective equipment and precautions for fire-fighters

Protection during firefighting	Self-contained breathing apparatus - Do not enter fire area without proper protective equipment, including respiratory protection
Personal protection (Emergency response)	-

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

General measures	Spilled material may present a slipping hazard.
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### For non-emergency personnel

Emergency procedures	Evacuate unnecessary personnel.
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### For emergency responders

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

### Environmental precautions

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

### 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

### 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 precautionary statements

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 equipment

### Personal protective equipment

#### General:

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

**Other information**

Do not eat, drink or smoke during use.

## SECTION 9 Physical and chemical properties

### 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
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)

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Viscosity, dynamic	No data available
Explosive properties	No data available
Oxidising properties	No data available
Explosive limits	No data available

### Other information

SADT	55 ° C (Peroxide)
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### 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

#### Likely routes of exposure

No additional information available

#### Synonyms

No additional information available

#### Acute toxicity

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

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-butanediyl ester (2082-81-7)	
LD50 oral rat	10066 mg/kg
LD50 dermal rat	> 3000 mg/kg
1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)	
LD50 oral rat	25 mg/kg
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)

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### SECTION 12: Ecological information

#### Ecotoxicity

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Acute aquatic toxicity

Toxic to aquatic life.

<b>2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)</b>	
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)
<b>2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)</b>	
LC50 other aquatic organisms 1	9.79 mg/l
NOEC (acute)	7.51 mg/l
NOEC (chronic)	20 mg/l
<b>1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)</b>	
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
<b>dibenzoyl peroxide (94-36-0)</b>	
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
<b>dicyclohexyl phthalate (84-61-7)</b>	
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

#### Persistence and degradability

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

#### Bioaccumulative potential

<b>2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)</b>	
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).

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<b>2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)</b>	
Log Pow	3.1
<b>1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)</b>	
BCF fish l	≈
Log Kow	2.1
<b>dibenzoyl peroxide (94-36-0)</b>	
Log Pow	3.71
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).
<b>dicyclohexyl phthalate (84-61-7)</b>	
BCF fish l	640 (Pisces)
Log Pow	3 - 6.2
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).

### Mobility in soil

<b>2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)</b>	
Ecology - soil	Low potential for adsorption in soil.
<b>dibenzoyl peroxide (94-36-0)</b>	
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.

### Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

Waste treatment methods	-
Ecology - waste materials	Avoid release to the environment.
Sewage disposal recommendations	-
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

## SECTION 14: Transport information

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

ADR	IMDG	IATA	RID
<b>14.1. UN number</b>			
Not regulated	Not regulated	Not regulated	Not regulated
<b>14.2. UN proper shipping name</b>			
Not regulated	Not regulated	Not regulated	Not regulated
<b>14.3. Transport hazard class(es)</b>			
Not regulated	Not regulated	Not regulated	Not regulated
<b>14.4. Packing group</b>			
Not regulated	Not regulated	Not regulated	Not regulated





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ADR	IMDG	IATA	RID
<b>14.5. Environmental hazards</b>			
Not regulated	Not regulated	Not regulated	Not regulated
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 and the IBC Code

No data available

## SECTION 15: Regulatory information

No data available

## SECTION 16: Other information

Full text of H-statements:

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

**SDS prepared by**

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Revision date 2019/08/08

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Indication of changes:

Section	Changed item	Change	Comments
1	Supplier's details	Modified	

Other information None.

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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.*