

## Safety Data Sheet

according to the Model Work Health and Safety Regulations

Date of issue:29/01/2019 Revision date:29/01/2019 Supersedes: 13/11/2017 Version: 9.1

## SECTION 1: Identification: Product identifier and chemical identity

#### 1.1. Product identifier

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



#### 1.2. Other means of identification

No additional information available

#### 1.3. Recommended use of the chemical and restrictions on use

Recommended use Adhesive anchor capsule for anchor fastening in concrete

#### 1.4. Supplier's details

Hilti (Aust.) Pty. Ltd.
Level 5, 1G Homebush Bay Drive
P.O. Box 3217
2138 Rhodes NSW - Australia
T +61 131 292 - F +61 1300 135 042
serviceaustralia@hilti.com

#### 1.5. Emergency phone number

Emergency number +61 2 8748 1000

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the hazardous chemical

#### Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Skin sensitisation, Category 1 H317
Reproductive toxicity, Category 1B H360
Hazardous to the aquatic environment — Acute H401

Hazard, Category 2

Hazardous to the aquatic environment — H411

Chronic Hazard, Category 2

#### 2.2. Label elements

Hazard pictograms (GHS AU)







GHS07

GHS08

GHS09

Signal word (GHS AU)

Contains

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (5 - 10 %); 2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (5 - 10 %); dibenzoyl peroxide (1 - 2.5 %); dicyclohexyl phthalate

(1 - 2.5 %)

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

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

Precautionary statements (GHS AU)

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

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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

No additional information available

## **SECTION 3: Composition/information on ingredients**

Name	CAS-No.	%	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
2-Propenoic acid, 2-methyl-, monoester with 1,2- propanediol	27813-02-1	5 - 10	Eye Irrit. 2A, H319 Skin Sens. 1, H317
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester	2082-81-7	5 - 10	Skin Sens. 1B, H317 Aquatic Acute 3, H402 Aquatic Chronic 3, H412
dibenzoyl peroxide	94-36-0	1 - 2.5	Org. Perox. B, H241 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
dicyclohexyl phthalate	84-61-7	1 - 2.5	Skin Sens. 1, H317 Repr. 1B, H360 Aquatic Chronic 3, H412
1,1'-(p-tolylimino)dipropan-2-ol	38668-48-3	0.1 - 1	Acute Tox. 2 (Oral), H300 Eye Irrit. 2A, H319 Aquatic Acute 3, H402 Aquatic Chronic 3, H412

## **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.

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. Symptoms caused by exposure

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

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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

Hazardous decomposition products in case of

fire

Thermal decomposition generates : Carbon dioxide. Carbon monoxide.

#### 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.

## 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.

## SECTION 7: Handling and storage, including how the chemical may be safely used

#### 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.

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### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters - exposure standards

#### Exposure limit values for the other components

#### 8.2. Monitoring

No additional information available

#### 8.3. Appropriate engineering controls

No additional information available

#### 8.4. Personal protective equipment

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

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)	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

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**

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

Relative evaporation rate (butylacetate=1)

Melting point / Freezing point

No data available

Boiling point

No data available

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

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Auto-ignition temperature No data available Flammability (solid, gas) No data available

Vapour pressure Vapour pressure : 0.1 hPa

Relative density

Solubility

Log Pow

No data available in water.

No data available

Viscosity, kinematic : 20 Seconds (ISO 2431)

Explosive properties No data available
Explosive limits No data available
Minimum ignition energy No data available

SADT 55 °C dibenzoyl peroxide

Fat solubility No data available

## **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 (oral)

Acute toxicity (dermal)

Acute toxicity (inhalation)

Not classified

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)	
Chin correction/irritation	let close if ad	

Skin corrosion/irritation Not classified Serious eye damage/irritation Not classified

Respiratory or skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

Not classified

Not classified

Not classified

Reproductive toxicity May damage fertility or the unborn child.

STOT-single exposure Not classified STOT-repeated exposure Not classified

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Aspiration hazard Not classified

HVU M8 - M39	
Viscosity, kinematic	20 Seconds (ISO 2431)

## **SECTION 12: Ecological information**

According to the National Code of Practice for the Preparation of Material Safety Data Sheets, Environmental classification information is not mandatory. Information relevant for GHS classification is available on request

#### 12.1. Ecotoxicity

Acute aquatic toxicity Toxic to aquatic life.

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

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)
BCF fish 1	<= 100
BCF fish 2	3.2 Quantitative structure-activity relationship (QSAR)
Log Pow	0.97 (OECD 102 method)
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-butane	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
Log Pow	3.1
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
BCF fish 1	≈
Log Kow	2.1
dibenzoyl peroxide (94-36-0)	
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 (acute)	0.0316 mg/l (96h; Oncorhynchus mykiss; ECHA)
NOEC chronic fish	< 0.001
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 (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
BCF fish 1	640 (Pisces)
Log Pow	3 - 6.2

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## 12.2. Persistence and degradability

	W. 4.0
2-Propenoic acid, 2-methyl-, monoeste	er with 1,2-propanediol (27813-02-1)
Not rapidly degradable	
Persistence and degradability	Readily biodegradable in water.
2-Propenoic acid, 2-methyl-, 1,4-butane	ediyl ester (2082-81-7)
Not rapidly degradable	
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 <sub>2</sub> /g substance

## 12.3. Bioaccumulative potential

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)		
BCF fish 1	See section 12.1 on ecotoxicology	
BCF fish 2	See section 12.1 on ecotoxicology	
Log Pow	See section 12.1 on ecotoxicology	
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500).	
2-Propenoic acid, 2-methyl-, 1,4-butanediyl est	ter (2082-81-7)	
Log Pow	See section 12.1 on ecotoxicology	
1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)		
BCF fish 1	See section 12.1 on ecotoxicology	
Log Kow	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	
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).	
dicyclohexyl phthalate (84-61-7)		
BCF fish 1	See section 12.1 on ecotoxicology	
Log Pow	See section 12.1 on ecotoxicology	
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-ol (38668-48-3)		
Log Kow	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.	
dicyclohexyl phthalate (84-61-7)		
Log Pow	See section 12.1 on ecotoxicology	

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#### 12.5. Other adverse effects

Ozone Not classified

Other adverse effects No additional information available

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Fluorinated greenhouse gases False

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)

Fluorinated greenhouse gases False

#### 2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)

Fluorinated greenhouse gases False

## 1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)

Fluorinated greenhouse gases False

#### dibenzoyl peroxide (94-36-0)

Fluorinated greenhouse gases False

#### dicyclohexyl phthalate (84-61-7)

Fluorinated greenhouse gases False

## **SECTION 13: Disposal considerations**

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**

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 cla	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		
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

Specific storage requirement No data available

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Shock sensitivity No data available

#### 14.7. Additional information

Other information No supplementary information available

Transport by road and rail

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

#### 14.8. Hazchem or Emergency Action Code

Hazchemcode Not applicable

## **SECTION 15: Regulatory information**

## 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

No additional information available

#### 15.2. International agreements

No additional information available

## **SECTION 16: Any other relevant information**

Indication of changes:

Section	Changed item	Change	Comments
2.1	Classification (GHS AU)	Modified	
2.2	Additional hazards when processed	Added	
2.2	Hazard statements (GHS AU)	Added	
3	Composition/information on ingredients	Modified	

Revision date 29/01/2019
Other information None.

Classification:

Skin Sens. 1	H317	
Repr. 1B	H360	
Aquatic Acute 2	H401	
Aquatic Chronic 2	H411	

Full text of H-statements:

Acute Tox. 2 (Oral)	Acute toxicity (oral), Category 2
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Acute 2	Hazardous to the aquatic environment — Acute Hazard, Category 2
Aquatic Acute 3	Hazardous to the aquatic environment — Acute Hazard, Category 3
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. 2A	Serious eye damage/eye irritation, Category 2A
Org. Perox. B	Organic Peroxides, Type B
Repr. 1B	Reproductive toxicity, Category 1B
Skin Sens. 1	Skin sensitisation, Category 1

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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.	
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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