HIT-HY 270

Safety information for 2-Component-products

Issue date: 06/12/2022 Revision date: 06/12/2022 Supersedes: 27/11/2018 Version: 2.3

SECTION 1: Kit identification

1.1 Product identifier

Trade name HIT-HY 270

Product code BU Anchor

1.2 Details of the supplier of the Safety information for 2-Component-products

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

SECTION 2: General information

Restrictions on use For professional use only

Storage Storage temperature : 5 - 25 °C

A SDS for each of these components is included. Please do not separate any component SDS from this cover page

This Kit should be handled in accordance with good laboratory practices and appropriate personal protective equipment should be used

SECTION 3:

Classification of the Product

2.1. Classification of the hazardous chemical

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

Serious eye damage/eye irritation, Category 2A	H319
Skin sensitisation, Category 1	H317
Reproductive toxicity, Category 1B	H360

2.2. Label elements

Hazard pictograms (GHS AU)

GHS07 GHS08

Signal word (GHS AU) Danger

Contains methacrylates, dibenzoyl peroxide, boric acid

Hazard statements (GHS AU) H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H360 - May damage fertility.

Precautionary statements (GHS AU) P280 - Wear eye protection, protective clothing, protective gloves.

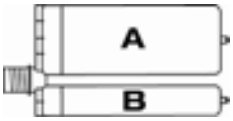
P262 - Do not get in eyes, on skin, or on clothing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

2.3. Other hazards not contributing to the classification

No additional information available

Additional information

2-Component-foilpack, contains:
Component A: Urethane methacrylate resin, inorganic filler
Component B: Dibenzoyl peroxide, phlegmatized



Name	General description	Quantity	Unit	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
HIT-HY 270, B		1	pcs (pieces)	Skin Sens. 1, H317
HIT-HY 270, A		1	pcs (pieces)	Eye Irrit. 2A, H319 Skin Sens. 1, H317 Repr. 1B, H360

SECTION 4: General advice

General advice	For professional users only

SECTION 5: Safe handling advice

General measures	Spilled material may present a slipping hazard
Environmental precautions	Prevent entry to sewers and public waters Notify authorities if liquid enters sewers or public waters
Storage conditions	Keep cool. Protect from sunlight.
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
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.
For containment	Collect spillage.
Incompatible materials	Sources of ignition Direct sunlight
Incompatible products	Strong bases Strong acids

SECTION 6: First aid measures

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 Get medical advice/attention.

	Do not induce vomiting Obtain emergency medical attention
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
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 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)
Symptoms/effects after eye contact	May cause severe irritation
Symptoms/effects after skin contact	May cause an allergic skin reaction.

SECTION 7: Fire fighting 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
Hazardous decomposition products in case of fire	Thermal decomposition generates : Carbon dioxide Carbon monoxide

SECTION 8: Other information

No data available

HIT-HY 270, A

Safety Data Sheet

according to the Work Health and Safety (WHS) Regulations

Issue date: 06/12/2022 Revision date: 06/12/2022 Supersedes: 27/11/2018 Version: 2.3

SECTION 1: Product identifier

1.1. GHS Product identifier

Product form	Mixture
Trade name	HIT-HY 270, A
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	Composite mortar component for fasteners in the construction industry
Restrictions on use	For professional use only

1.4. Details of manufacturer or importer

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

Department issuing data specification sheet:
Hilti Entwicklungsgesellschaft mbH
Hiltistraße 6
Kaufering 86916
Deutschland
T +49 8191 906876
anchor.hse@hilti.com

1.5. Emergency phone number

Emergency number	Schweizerisches Toxikologisches Informationszentrum – 24h Service +41 44 251 51 51 (international) +61 2 8748 1000

SECTION 2: Hazard identification

2.1. Classification of the hazardous chemical

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

Serious eye damage/eye irritation, Category 2A	H319
Skin sensitisation, Category 1	H317
Reproductive toxicity, Category 1B	H360

2.2. GHS Label elements, including precautionary statements

Hazard pictograms (GHS AU)

Exclamation mark — Health hazard

Signal word (GHS AU)	Danger
Contains	2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (10 – 25 %); Tricyclodecane dimethanol dimethacrylate (2,5 - 5 %); boric acid (0.1 – 1 %); 4-tert-butylpyrocatechol (0,1 - 1 %)
Hazard statements (GHS AU)	H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation H360 - May damage fertility.
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 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 which do not result in classification

No additional information available

SECTION 3: Composition and 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	10 – 25	Eye Irrit. 2A, H319 Skin Sens. 1, H317
Bisphenol-A-diethoxy-methacrylate	24448-20-2	5 – 10	Skin Irrit. 2, H315 Eye Irrit. 2A, H319
Tricyclodecane dimethanol dimethacrylate	43048-08-4	2,5 - 5	Skin Sens. 1B, H317 Aquatic Chronic 2, H411
1,1,1-Trimethylolpropane trimethacrylate	3290-92-4	2,5 - 5	Aquatic Acute 2, H401 Aquatic Chronic 2, H411
1,1'-(p-tolylimino)dipropan-2-ol	38668-48-3	0,1 - 1	Acute Tox. 2 (Oral), H300 Eye Irrit. 2A, H319
boric acid	10043-35-3	0.1 – 1	Acute Tox. 5 (Oral), H303 Repr. 1B, H360 Aquatic Chronic 3, H412
4-tert-butylpyrocatechol	98-29-3	0,1 - 1	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

SECTION 4: First aid measures

4.1. Description of necessary 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. Allow affected person to breathe fresh air. 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. 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. Medical attention and special treatment

No additional information available

SECTION 5: Fire-fighting 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. Specific hazards arising from the chemical

General measures	Spilled material may present a slipping hazard.
Hazardous decomposition products in case of fire	Thermal decomposition generates : Carbon dioxide. Carbon monoxide.

5.3. Special protective equipment and precautions for 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.

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 materials 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

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.
Handling temperature	5 – 40 °C
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.
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 and personal protection

8.1. Control parameters - exposure standards

Additional information	The product has a pasty consistency. Exposure limit values for respirable dusts are not relevant for this product.

8.2. Biological Monitoring

No additional information available

8.3. Engineering controls

Appropriate engineering controls	Ensure adequate ventilation.

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

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.

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,12		EN ISO 374

Eye protection: Wear security glasses which protect from splashes

Type	Field of application	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166, EN 170

Personal protective equipment symbol(s)

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	Thixotropic paste.
Colour	light brown
Odour	characteristic
Odour threshold	Not determined
pH	No data available
pH solution	No data available
Relative evaporation rate (butylacetate=1)	No data available
Melting point / Freezing point	No data available
Boiling point	No data available
Flash point	> 100 °C DIN EN ISO 1523
Auto-ignition temperature	Not self-igniting
Flammability	No data available
Vapour pressure	No data available
Relative density	No data available
Density	Density: 1.66 g/cm³ DIN 51757
Solubility	Water: Not miscible
Partition coefficient n-octanol/water (Log Pow)	No data available
Viscosity, kinematic	48192.771 mm²/s
Viscosity, dynamic	80 Pa·s HN-0333
Explosive properties	Product is not explosive.
Explosive limits	No data available
Minimum ignition energy	No data available
Fat solubility	No data available

SECTION 10: Stability and reactivity

Reactivity	No additional information available
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)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified

HIT-HY 270, A	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 Inhalation - Rat (Vapours)	> 20 mg/l/4h

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)

1,1,1-Trimethylolpropane trimethacrylate (3290-92-4)	
LD50 oral rat	> 5000 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

boric acid (10043-35-3)	
LD50 oral rat	2660 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; >2600 mg/kg bodyweight; Rat; Experimental value)
LD50 oral	2660 mg/kg
LD50 dermal rabbit	> 2000 mg/kg Rabbit; Experimental value; FIFRA (40 CFR)
LD50 dermal	2500 mg/kg

4-tert-butylpyrocatechol (98-29-3)	
LD50 oral rat	815 mg/kg bodyweight (Rat; Lethal; ECHA)
LD50 oral	2820 mg/kg
LD50 dermal rat	1331 mg/kg bodyweight (Rat;Lethal; ECHA)
LD50 dermal	630 mg/kg

Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	May damage fertility.
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified

Aspiration hazard	Not classified

HIT-HY 270, A	
Viscosity, kinematic	48192.771 mm²/s

Potential adverse human health effects and symptoms	No additional information available

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

Hazardous to the aquatic environment, short–term (acute)	Not classified
Hazardous to the aquatic environment, long–term (chronic)	Not classified
Other information	Avoid release to the environment.

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 - Crustacea [1]	> 143 mg/l (48 h; Daphnia magna; GLP)
ErC50 algae	97.2 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
BCF - Fish [1]	≤ 100
BCF - Fish [2]	3.2 Quantitative structure-activity relationship (QSAR)
Partition coefficient n-octanol/water (Log Pow)	0.97 (OECD 102 method)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.9 (log Koc, Calculated value)
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)

1,1,1-Trimethylolpropane trimethacrylate (3290-92-4)	
LC50 - Fish [1]	2 mg/l
ErC50 algae	3.88 mg/l
NOEC chronic fish	0.138 mg/l
NOEC chronic crustacea	0.177 mg/l
BCF - Fish [2]	366 l/kg
Partition coefficient n-octanol/water (Log Kow)	4.39
Partition coefficient n-octanol/water (Log Pow)	3.53

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 - Crustacea [1]	28.8 mg/l
NOEC (acute)	57.8 mg/l
Partition coefficient n-octanol/water (Log Kow)	2.1

boric acid (10043-35-3)	
LC50 - Fish [1]	447 mg/l
LC50 - Fish [2]	79 ppm (96 h; Salmo gairdneri (Oncorhynchus mykiss); Hard water)

boric acid (10043-35-3)	
EC50 - Crustacea [1]	658 – 875 mg/l (48 h; Daphnia magna)
EC50 - Crustacea [2]	19.7 mg/l (336 h; Daphnia magna)
ErC50 algae	290 mg/l
NOEC chronic fish	2.1 mg/l
BCF - Fish [2]	< 0.1 (60 days; Oncorhynchus tshawytscha; Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	-1.09 (Experimental value; EU Method A.8: Partition Coefficient; 22 °C)

4-tert-butylpyrocatechol (98-29-3)	
LC50 - Fish [1]	0.12 mg/l (96 h, Danio rerio, Lethal, ECHA)
ErC50 algae	10.17 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
Partition coefficient n-octanol/water (Log Pow)	1.98 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.37 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)

12.2. Persistence and degradability

HIT-HY 270, A	
Persistence and degradability	Not established.

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
Not rapidly degradable	
Persistence and degradability	Readily biodegradable in water.

Bisphenol-A-diethoxy-methacrylate (24448-20-2)	
Not rapidly degradable	

1,1,1-Trimethylolpropane trimethacrylate (3290-92-4)	
Not rapidly degradable	

boric acid (10043-35-3)	
Not rapidly degradable	

4-tert-butylpyrocatechol (98-29-3)	
Not rapidly degradable	
Persistence and degradability	Not readily biodegradable in water.
ThOD	2.4 g O_2/g substance

12.3. Bioaccumulative potential

HIT-HY 270, A	
Bioaccumulative potential	Not established.

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)
Partition coefficient n-octanol/water (Log Pow)	0.97 (OECD 102 method)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.9 (log Koc, Calculated value)
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500).

1,1,1-Trimethylolpropane trimethacrylate (3290-92-4)	
BCF - Fish [2]	366 l/kg
Partition coefficient n-octanol/water (Log Pow)	3.53
Partition coefficient n-octanol/water (Log Kow)	4.39

1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)	
Partition coefficient n-octanol/water (Log Kow)	2.1

boric acid (10043-35-3)	
BCF - Fish [2]	< 0.1 (60 days; Oncorhynchus tshawytscha; Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	-1.09 (Experimental value; EU Method A.8: Partition Coefficient; 22 °C)
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500).

4-tert-butylpyrocatechol (98-29-3)	
Partition coefficient n-octanol/water (Log Pow)	1.98 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.37 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
Ecology - soil	Highly mobile in soil.
Partition coefficient n-octanol/water (Log Pow)	0.97 (OECD 102 method)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.9 (log Koc, Calculated value)

1,1,1-Trimethylolpropane trimethacrylate (3290-92-4)	
Partition coefficient n-octanol/water (Log Pow)	3.53
Partition coefficient n-octanol/water (Log Kow)	4.39

1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)	
Partition coefficient n-octanol/water (Log Kow)	2.1

boric acid (10043-35-3)	
Surface tension	No data available in the literature
Ecology - soil	No (test)data on mobility of the substance available. May be harmful to plant growth, blooming and fruit formation.
Partition coefficient n-octanol/water (Log Pow)	-1.09 (Experimental value; EU Method A.8: Partition Coefficient; 22 °C)

4-tert-butylpyrocatechol (98-29-3)	
Surface tension	No data available (test not performed)
Ecology - soil	Highly mobile in soil.
Partition coefficient n-octanol/water (Log Pow)	1.98 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.37 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)

12.5. Other adverse effects

Ozone: Not classified

Other adverse effects: No additional information available

SECTION 13: Disposal considerations

Regional legislation (waste)	Disposal must be done according to official regulations.
Waste treatment methods	Dispose of contents/container in accordance with licensed collector's sorting instructions.
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.
Additional information	Clean up even minor leaks or spills if possible without unnecessary risk.
Ecology - waste materials	Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID

ADR	IMDG	IATA	RID
14.1. UN number or ID 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
No supplementary information available			

14.6. Special precautions for user

Overland transport
Not regulated

Transport by sea
Not regulated

Air transport
Not regulated

Rail transport
Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

Australian Industrial Chemicals Introduction Scheme (AICIS)

Australian Inventory of Industrial Chemicals (AICIS Inventory) status	All the chemicals contained in this product are listed introductions

15.2. International agreements

No additional information available

SECTION 16: Other information

Indication of changes			
Section	**Changed item**	**Change**	**Comments**
	Legislation	Modified	
2.1	Classification (GHS AU)	Modified	
2.2	Hazard statements (GHS AU)	Removed	
3	Composition/information on ingredients	Modified	

Abbreviations and acronyms

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE - Acute Toxicity Estimate
BCF - Bioconcentration factor
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL - Derived Minimal Effect level
DNEL - Derived-No Effect Level
EC50 - Median effective concentration
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association
IMDG - International Maritime Dangerous Goods
LC50 - Median lethal concentration
LD50 - Median lethal dose
LOAEL - Lowest Observed Adverse Effect Level
NOAEC - No-Observed Adverse Effect Concentration
NOAEL - No-Observed Adverse Effect Level
NOEC - No-Observed Effect Concentration
OECD - Organisation for Economic Co-operation and Development
PBT - Persistent Bioaccumulative Toxic
PNEC - Predicted No-Effect Concentration
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS - Safety Data Sheet
vPvB - Very Persistent and Very Bioaccumulative

Revision date: 06/12/2022

Other information: None.

Classification	
Eye Irrit. 2A	H319
Skin Sens. 1	H317
Repr. 1B	H360

Full text of H-statements	
Acute Tox. 2 (Oral)	Acute toxicity (oral), Category 2
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Acute Tox. 5 (Oral)	Acute toxicity (oral), Category 5
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1

Full text of H-statements	
Aquatic Acute 2	Hazardous to the aquatic environment – Acute Hazard, Category 2
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
Repr. 1B	Reproductive toxicity, Category 1B
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
H300	Fatal if swallowed
H302	Harmful if swallowed
H303	May be harmful if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
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
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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HIT-HY 270, B

Safety Data Sheet

according to the Work Health and Safety (WHS) Regulations

Issue date: 06/12/2022 Revision date: 06/12/2022 Supersedes: 27/11/2018 Version: 2.3

SECTION 1: Product identifier

1.1. GHS Product identifier

Product form	Mixture
Product name	HIT-HY 270, B
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	Composite mortar component for fasteners in the construction industry
Restrictions on use	For professional use only

1.4. Details of manufacturer or importer

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

Department issuing data specification sheet:
Hilti Entwicklungsgesellschaft mbH
Hiltistraße 6
Kaufering 86916
Deutschland
T +49 8191 906876
anchor.hse@hilti.com

1.5. Emergency phone number

Emergency number	Schweizerisches Toxikologisches Informationszentrum – 24h Service +41 44 251 51 51 (international) +61 2 8748 1000

SECTION 2: Hazard 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

2.2. GHS Label elements, including precautionary statements

Hazard pictograms (GHS AU)

Exclamation mark

Signal word (GHS AU)	Warning
Contains	dibenzoyl peroxide (5 – 10 %)
Hazard statements (GHS AU)	H317 - May cause an allergic skin reaction
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 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 which do not result in classification

No additional information available

SECTION 3: Composition and information on ingredients

Name	CAS-No.	%	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
dibenzoyl peroxide	94-36-0	5 – 10	Org. Perox. B, H241 Eye Irrit. 2A, H319 Skin Sens. 1, H317

SECTION 4: First aid measures

4.1. Description of necessary 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. Allow affected person to breathe fresh air. 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. 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. Medical attention and special treatment

No additional information available

SECTION 5: Fire-fighting 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. Specific hazards arising from the chemical

General measures: Spilled material may present a slipping hazard.

Hazardous decomposition products in case of fire: Thermal decomposition generates : Carbon dioxide. Carbon monoxide.

5.3. Special protective equipment and precautions for 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.

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 materials 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

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.
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 and personal protection

8.1. Control parameters - exposure standards

HIT-HY 270, B	
Australia - Occupational Exposure Limits	
Local name	Benzoyl peroxide (Dibenzoyl peroxide)
OES TWA [1]	5 mg/m³
Remark (AU)	Sen - Respiratory and/or Skin Sensitiser.
Regulatory reference	Workplace exposure standards for airborne contaminants (2022)

Additional information: The product has a pasty consistency. Exposure limit values for respirable dusts are not relevant for this product.

8.2. Biological Monitoring

No additional information available

8.3. Engineering controls

Appropriate engineering controls: Ensure adequate ventilation.

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

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.

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,12		EN ISO 374

Eye protection: Wear security glasses which protect from splashes

Type	Field of application	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166, EN 170

Personal protective equipment symbol(s)

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	Thixotropic paste.
Colour	white
Odour	characteristic
Odour threshold	Not determined
pH	≈ 6
pH solution	No data available
Relative evaporation rate (butylacetate=1)	No data available
Melting point / Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Auto-ignition temperature	Not self-igniting
Flammability	No data available
Vapour pressure	No data available
Relative density	No data available
Density	Density: 1.7 g/cm³ DIN 51757
Solubility	Water: Not miscible
Partition coefficient n-octanol/water (Log Pow)	No data available
Viscosity, kinematic	52941.176 mm²/s
Viscosity, dynamic	90 Pa·s HN-0333
Explosive properties	Product is not explosive.
Explosive limits	No data available
Minimum ignition energy	No data available
SADT	65 °C
Fat solubility	No data available

SECTION 10: Stability and reactivity

Reactivity	No additional information available
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)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified

Skin corrosion/irritation	Not classified pH: ≈ 6
Serious eye damage/irritation	Not classified pH: ≈ 6
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified

HIT-HY 270, B	
Viscosity, kinematic	52941.176 mm²/s

Potential adverse human health effects and symptoms	No additional information available

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

Hazardous to the aquatic environment, short–term (acute)	Not classified
Hazardous to the aquatic environment, long–term (chronic)	Not classified
Other information	Avoid release to the environment.

dibenzoyl peroxide (94-36-0)	
LC50 - Fish [2]	0.0602 mg/l (96h; Oncorhynchus mykiss; ECHA)
EC50 - Crustacea [1]	0.11 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
ErC50 algae	0.0711 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
NOEC (acute)	0.0316 mg/l (96h; Oncorhynchus mykiss; ECHA)
NOEC chronic fish	0.001 mg/l
Partition coefficient n-octanol/water (Log Pow)	3.71
Organic Carbon Normalized Adsorption Coefficient (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)

12.2. Persistence and degradability

HIT-HY 270, B	
Persistence and degradability	Not established.

dibenzoyl peroxide (94-36-0)	
Persistence and degradability	Readily biodegradable in water. Not established. May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

HIT-HY 270, B	
Bioaccumulative potential	Not established.

dibenzoyl peroxide (94-36-0)	
Partition coefficient n-octanol/water (Log Pow)	3.71
Organic Carbon Normalized Adsorption Coefficient (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)
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).

12.4. Mobility in soil

dibenzoyl peroxide (94-36-0)	
Surface tension	No data available (test not performed)
Ecology - soil	Low potential for mobility in soil.
Partition coefficient n-octanol/water (Log Pow)	3.71
Organic Carbon Normalized Adsorption Coefficient (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)

12.5. Other adverse effects

Ozone: Not classified
Other adverse effects: No additional information available

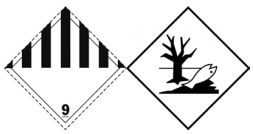
SECTION 13: Disposal considerations

Regional legislation (waste): Disposal must be done according to official regulations.
Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions.
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.
Additional information: Clean up even minor leaks or spills if possible without unnecessary risk.
Ecology - waste materials: Avoid release to the environment.

SECTION 14: Transport information

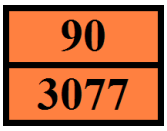
In accordance with ADR / IMDG / IATA / RID

ADR	IMDG	IATA	RID
14.1. UN number or ID number			
UN 3077	UN 3077	UN 3077	UN 3077
14.2. UN proper shipping name			
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide)	Environmentally hazardous substance, solid, n.o.s. (dibenzoyl peroxide)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide)
Transport document description			
UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide), 9, III, (-)	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide), 9, III, MARINE POLLUTANT	UN 3077 Environmentally hazardous substance, solid, n.o.s. (dibenzoyl peroxide), 9, III	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide), 9, III
14.3. Transport hazard class(es)			
9	9	9	9

ADR	IMDG	IATA	RID
			
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
not restricted according ADR Special Provision SP375, IATA-DGR Special Provision A197 and IMDG-Code 2.10.2.7			

14.6. Special precautions for user

Overland transport

Classification code (ADR)	M7
Special provisions (ADR)	274, 335, 375, 601
Limited quantities (ADR)	5kg
Packing instructions (ADR)	P002, IBC08, LP02, R001
Mixed packing provisions (ADR)	MP10
Transport category (ADR)	3
Orange plates	
Tunnel restriction code (ADR)	-

Transport by sea

Special provisions (IMDG)	274, 335, 966, 967, 969
Limited quantities (IMDG)	5 kg
Packing instructions (IMDG)	LP02, P002
EmS-No. (Fire)	F-A
EmS-No. (Spillage)	S-F
Stowage category (IMDG)	A
Stowage and handling (IMDG)	SW23

Air transport

PCA packing instructions (IATA)	956
PCA max net quantity (IATA)	400kg
CAO packing instructions (IATA)	956
Special provisions (IATA)	A97, A158, A179, A197, A215

Rail transport

Special provisions (RID)	274, 335, 375, 601
Limited quantities (RID)	5kg
Packing instructions (RID)	P002, IBC08, LP02, R001

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

Australian Industrial Chemicals Introduction Scheme (AICIS)

Australian Inventory of Industrial Chemicals (AICIS Inventory) status: All the chemicals contained in this product are listed introductions

15.2. International agreements

No additional information available

SECTION 16: Other information

Indication of changes			
Section	**Changed item**	**Change**	**Comments**
	Legislation	Modified	

Abbreviations and acronyms:

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE - Acute Toxicity Estimate
BCF - Bioconcentration factor
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL - Derived Minimal Effect level
DNEL - Derived-No Effect Level
EC50 - Median effective concentration
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association
IMDG - International Maritime Dangerous Goods
LC50 - Median lethal concentration
LD50 - Median lethal dose
LOAEL - Lowest Observed Adverse Effect Level
NOAEC - No-Observed Adverse Effect Concentration
NOAEL - No-Observed Adverse Effect Level
NOEC - No-Observed Effect Concentration
OECD - Organisation for Economic Co-operation and Development
PBT - Persistent Bioaccumulative Toxic
PNEC - Predicted No-Effect Concentration
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS - Safety Data Sheet
vPvB - Very Persistent and Very Bioaccumulative

Revision date: 06/12/2022

Other information: None.

Classification	
Skin Sens. 1	H317

Full text of H-statements	
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Org. Perox. B	Organic Peroxides, Type B
Skin Sens. 1	Skin sensitisation, Category 1

Full text of H-statements	
H241	Heating may cause a fire or explosion
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation

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