

HIT-HY 200-R V3

Safety information for 2-Component-products

Issue date: 29/02/2024

Revision date: 29/02/2024

Supersedes: 13/01/2021

Version: 1.1

SECTION 1: Kit identification

1.1 Product identifier

Product name HIT-HY 200-R V3
Product code BU Anchor



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

Hilti (Malaysia) Sdn. Bhd.
F-5-A, Sime Darby Brunfield Tower, No. 2, Jalan PJU 1A/7A
Oasis Square, Oasis Damansara
47301 Petaling Jaya, Selangor - Malaysia
T +60 3 5628 7222
1800 880 985 toll free - F +60 3 7848 7399
myhilti@hilti.com

SECTION 2: General information

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: Kit contents

Classification of the Product

Classification according to Industry Code of Practice on chemicals classification and hazard communication (2014)

Eye Irrit. 2	H319
Skin Sens. 1	H317
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

Label elements

Labelling according to Industry Code of Practice on chemicals classification and hazard communication (2014)

Hazard pictograms (GHS MY)



GHS07

GHS09

Signal word (GHS MY)

Warning

Hazard statements (GHS MY)

H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H410 - Very toxic to aquatic life with long lasting effects

HIT-HY 200-R V3

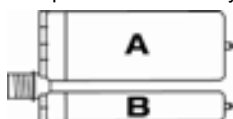
Kit Safety Information Sheet (SIS)

Precautionary statements (GHS MY)

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 soap and water
 P337+P313 - If eye irritation persists: Get medical advice/attention
 P333+P313 - If skin irritation or rash occurs: Get medical advice/attention

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 Industry Code of Practice on chemicals classification and hazard communication (2014)
HIT-HY 200-R V3, B		1	pcs (pieces)	Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
HIT-HY 200-R V3, A		1	pcs (pieces)	Skin Sens. 1, H317 Aquatic Acute Not classified Aquatic Chronic Not classified

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

HIT-HY 200-R V3

Kit Safety Information Sheet (SIS)

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.
Other medical advice or treatment	Treat symptomatically

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 200-R V3, B

Safety Data Sheet

According to ICOP 2014

Issue date: 29/02/2024 Revision date: 29/2/2024

Supersedes: 13/01/2021

Version: 1.1

SECTION 1: Identification of the hazardous chemical and of the supplier

1.1. Product identifier

Name HIT-HY 200-R V3, B
 Chemical name Injection Mortar HIT-HY 200-R V3

1.2. Other means of identification

Product code BU Anchor

1.3. Recommended use of the chemical and restrictions on use

Restrictions on use For professional use only

1.4. Supplier details

Supplier

Hilti (Malaysia) Sdn. Bhd.
 F-5-A, Sime Darby Brunfield Tower, No. 2, Jalan PJU 1A/7A
 Oasis Square, Oasis Damansara
 47301 Petaling Jaya, Selangor
 Malaysia
 T +60 3 5628 7222
 1800 880 985 toll free - F +60 3 7848 7399
myhilti@hilti.com

Department issuing data specification sheet

Hilti Entwicklungsgesellschaft mbH
 Hiltistraße 6
 86916 Kaufering
 Deutschland
 T +49 8191 906876
product.compliance-anchors@hilti.com

1.5. Emergency phone number

Emergency number GBK GmbH Global Regulatory Compliance
 +49 (0)6132-84463

Country	Organisation/Company	Address	Emergency number	Comment
Malaysia	Malaysia National Poison Centre (NPC) Universiti Sains Malaysia	11800 Penang	+60 (0)4 6536 999 (Mon-Fri 8am-10pm; Sat, Sun & Public Holiday 8am-5pm)	

SECTION 2: Hazards identification

2.1. Classification of the hazardous chemical

Classification according to Industry Code of Practice on chemicals classification and hazard communication (2019)

Serious eye damage or eye irritation, Category 2 H319
 Skin sensitisation, Category 1 H317
 Hazardous to the aquatic environment – Acute Hazard, Category 1 H400
 Hazardous to the aquatic environment – Chronic Hazard, Category 1 H410

2.2. Label elements

Labelling according to Industry Code of Practice on chemicals classification and hazard communication (2019)

Hazard pictograms (GHS MY)



Signal word (GHS MY)

Warning

Contains

dibenzoyl peroxide

Hazard statements (GHS MY)

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H410 - Very toxic to aquatic life with long lasting effects

HIT-HY 200-R V3, B

Safety Data Sheet

According to ICOP 2014

Precautionary statements (GHS MY)

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 soap and 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 that do not result in classification

No additional information available

SECTION 3: Composition and information of the ingredients of the hazardous chemical

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
dibenzoyl peroxide	CAS-No.: 94-36-0	10 – 25

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. Most important symptoms/effects, 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 immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment	Treat symptomatically.
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SECTION 5: Fire-fighting measures

5.1. Suitable 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. Physicochemical hazards arising from the chemical

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

HIT-HY 200-R V3, B

Safety Data Sheet

According to ICOP 2014

EAC code

2Z

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.

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

Storage temperature 5 – 25 °C

SECTION 8: Exposure controls and personal protection

8.1. Control parameters

HIT-HY 200-R V3, B	
Malaysia - Occupational Exposure Limits	
Local name	Benzoil peroksida # Benzoyl peroxide
PEL (OEL TWA)	5 mg/m ³
MEL (mg/m ³)	15 mg/m ³
dibenzoyl peroxide (94-36-0)	
Malaysia - Occupational Exposure Limits	
Local name	Benzoil peroksida # Benzoyl peroxide
PEL (OEL TWA)	5 mg/m ³
MEL (mg/m ³)	15 mg/m ³

HIT-HY 200-R V3, B

Safety Data Sheet

According to ICOP 2014

Exposure limit values for the other components

Additional information

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

8.1.1 Biological monitoring

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls

Ensure good ventilation of the work station.

8.3. Individual protection measures, such as 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. Change contaminated gloves after 30 min. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	3 (> 60 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

No specific measures are required provided the product is handled in accordance with the general rules of occupational hygiene and safety.

Consumer exposure controls

Avoid contact during pregnancy/while nursing.

SECTION 9: Physical and chemical properties

Physical state	Solid
Appearance	Thixotropic paste.
Colour	white
Odour	characteristic
Odour threshold	Not determined
pH	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	Flammable solid.
Explosive limits	No data available
Vapour pressure	No data available
Relative vapour density at 20°C	No data available
Relative density	No data available

HIT-HY 200-R V3, B

Safety Data Sheet

According to ICOP 2014

Solubility	Water: Not miscible
Partition coefficient n-octanol/water (Log Pow)	No data available
Partition coefficient n-octanol/water (Log Kow)	No data available
Auto-ignition temperature	Not self-igniting
Decomposition temperature	No data available
Viscosity, kinematic	21052.632 mm ² /s
Viscosity, dynamic	40 Pa·s HN-0333
Explosive properties	Product is not explosive.
Density	1.9 g/ml AW 4.3.23
SADT	65 °C

SECTION 10: Stability and reactivity

Reactivity	No data 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

11.1. Information on toxicological effects

Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified
Skin corrosion or irritation	Not classified
Serious eye damage or eye irritation	Causes serious eye irritation.
Respiratory sensitization	Not classified
Skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified

dibenzoyl peroxide (94-36-0)	
IARC group	3 - Not classifiable
Reproductive toxicity	Not classified
Specific target organ toxicity (STOT) – single exposure	Not classified
Specific target organ toxicity (STOT) – repeated exposure	Not classified
Aspiration hazard	Not classified
HIT-HY 200-R V3, B	
Viscosity, kinematic	21052.632 mm ² /s
Potential adverse human health effects and symptoms	No additional information available.

SECTION 12: Ecological information

12.1. Ecotoxicity

Hazardous to the aquatic environment, short-term (acute)	Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	Very toxic to aquatic life with long lasting effects.

HIT-HY 200-R V3, B

Safety Data Sheet

According to ICOP 2014

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 200-R V3, 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 200-R V3, 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

HIT-HY 200-R V3, B	
Mobility in soil	No additional information available
dibenzoyl peroxide (94-36-0)	
Surface tension	No data available (test not performed)
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)
Ecology - soil	Low potential for mobility in soil.

12.5. Other adverse effects

Ozone	Not classified
Other adverse effects	No additional information available

HIT-HY 200-R V3, B

Safety Data Sheet

According to ICOP 2014

SECTION 13: Disposal information

13.1. Disposal methods

Product/Packaging disposal recommendations	After curing, the product can be disposed of with household waste. . Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. Packaging contaminated by the product : Dispose in a safe manner in accordance with local/national regulations.
Ecological information	Avoid release to the environment.

SECTION 14: Transportation information

In accordance with ADR / IMDG / IATA / RID

ADR	IMDG	IATA	RID
Special provision(s) applied : 375	Special provision(s) applied : 969	Special provision(s) applied : A197	Special provision(s) applied : 375
These substances when carried in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to any other provisions of ADR provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.			
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	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
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
Environmentally hazardous substances derogation applies (quantity of liquids ≤ 5 litres or net mass of solids ≤ 5 kg). The environmentally hazardous substance mark is therefore not required, as stated in the ADR regulation, section 5.2.1.8.1.			
not restricted according ADR Special Provision SP375, IATA-DGR Special Provision A197 and IMDG-Code 2.10.2.7			

HIT-HY 200-R V3, B

Safety Data Sheet

According to ICOP 2014

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	<div style="border: 2px solid black; padding: 5px; display: inline-block; text-align: center;"> <div style="background-color: orange; color: black; width: 40px; height: 20px; margin: 0 auto; line-height: 20px; font-weight: bold;">90</div> <div style="background-color: orange; color: black; width: 40px; height: 20px; margin: 0 auto; line-height: 20px; font-weight: bold;">3077</div> </div>

Tunnel restriction code (ADR)	-
EAC code	2Z

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 hazardous chemical in question

Regulation	Component/ Mixture
EHS Notification and Registration Scheme	

15.2. International agreements

No additional information available

SECTION 16: Other information

Version	1.1
Issue date	29/2/2024
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Supersedes	13/01/2021

HIT-HY 200-R V3, B

Safety Data Sheet

According to ICOP 2014

Indication of changes			
Section	Changed item	Change	Comments
	Transport information	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

Other information

None.

Full text of H-statements	
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

SDS_MY_Hilti

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.

HIT-HY 200-R V3, A

Safety Data Sheet

According to ICOP 2014

Issue date: 29/02/2024 Revision date: 29/2/2024

Supersedes: 13/01/2021

Version: 1.1

SECTION 1: Identification of the hazardous chemical and of the supplier

1.1. Product identifier

Name HIT-HY 200-R V3, A
Chemical name Injection Mortar HIT-HY 200-R V3

1.2. Other means of identification

Product code BU Anchor

1.3. Recommended use of the chemical and restrictions on use

Restrictions on use For professional use only

1.4. Supplier details

Supplier

Hilti (Malaysia) Sdn. Bhd.
F-5-A, Sime Darby Brunfield Tower, No. 2, Jalan PJU 1A/7A
Oasis Square, Oasis Damansara
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Department issuing data specification sheet

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86916 Kaufering
Deutschland
T +49 8191 906876
product.compliance-anchors@hilti.com

1.5. Emergency phone number

Emergency number GBK GmbH Global Regulatory Compliance
+49 (0)6132-84463

Country	Organisation/Company	Address	Emergency number	Comment
Malaysia	Malaysia National Poison Centre (NPC) Universiti Sains Malaysia	11800 Penang	+60 (0)4 6536 999 (Mon-Fri 8am-10pm; Sat, Sun & Public Holiday 8am-5pm)	

SECTION 2: Hazards identification

2.1. Classification of the hazardous chemical

Classification according to Industry Code of Practice on chemicals classification and hazard communication (2019)

Skin sensitisation, Category 1

H317

2.2. Label elements

Labelling according to Industry Code of Practice on chemicals classification and hazard communication (2019)

Hazard pictograms (GHS MY)



Signal word (GHS MY)

Warning

Hazard statements (GHS MY)

H317 - May cause an allergic skin reaction

Precautionary statements (GHS MY)

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 soap and water

HIT-HY 200-R V3, A

Safety Data Sheet

According to ICOP 2014

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 that do not result in classification

No additional information available

SECTION 3: Composition and information of the ingredients of the hazardous chemical

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester	CAS-No.: 2082-81-7	10 – 25
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol	CAS-No.: 27813-02-1	5 – 10
1,1'-(p-tolylimino)dipropan-2-ol	CAS-No.: 38668-48-3	0.1 – 1
2,2'-(m-tolylimino)diethanol	CAS-No.: 91-99-6	0.1 – 1

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.

4.2. Most important symptoms/effects, 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 immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable 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. Physicochemical hazards arising from the chemical

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.

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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.
Heat and ignition sources Keep away from heat and direct sunlight.
Storage temperature 5 – 25 °C

SECTION 8: Exposure controls and personal protection

8.1. Control parameters

HIT-HY 200-R V3, A	
Malaysia - Occupational Exposure Limits	
Local name	Aluminium oksida (α-Alumina) # Aluminium oxide (α-Alumina)
PEL (OEL TWA)	10 mg/m ³ Nilai adalah bagi jirim zarahhan yang tidak mengandungi asbestos dan < 1 % silika berhablur. # The value is for particulate matter containing no asbestos and < 1 % crystalline silica.
MEL (mg/m ³)	30 mg/m ³

Exposure limit values for the other components

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

8.1.1 Biological monitoring

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls Ensure good ventilation of the work station.

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8.3. Individual protection measures, such as 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. Change contaminated gloves after 30 min. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	3 (> 60 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

Consumer exposure controls

Not applicable.

Avoid contact during pregnancy/while nursing.

SECTION 9: Physical and chemical properties

Physical state	Solid
Appearance	Thixotropic paste.
Colour	Black
Odour	characteristic
Odour threshold	Not determined
pH	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	> 109 °C DIN EN ISO 1523
Evaporation rate	No data available
Flammability (solid, gas)	Flammable solid.
Explosive limits	No data available
Vapour pressure	No data available
Relative vapour density at 20°C	No data available
Relative density	No data available
Solubility	Water: Not miscible
Partition coefficient n-octanol/water (Log Pow)	No data available
Partition coefficient n-octanol/water (Log Kow)	No data available
Auto-ignition temperature	Not self-igniting
Decomposition temperature	No data available
Viscosity, kinematic	27777.778 mm ² /s
Viscosity, dynamic	50 Pa·s HN-0333
Explosive properties	Product is not explosive.
Density	1.8 g/ml AW 4.3.23

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SECTION 10: Stability and reactivity

Reactivity	No data 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

11.1. Information on toxicological effects

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

2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	
LD50 oral rat	10066 mg/kg
LD50 oral	10060 mg/kg
LD50 dermal rat	> 3000 mg/kg

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'-(p-tolylimino)dipropan-2-ol (38668-48-3)	
LD50 oral rat	25 mg/kg
LD50 dermal rat	> 2000 mg/kg

2,2'-(m-tolylimino)diethanol (91-99-6)	
LD50 oral rat	300 – 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg

Skin corrosion or irritation	Not classified
Serious eye damage or eye irritation	Not classified
Respiratory sensitization	Not classified
Skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity (STOT) – single exposure	Not classified
Specific target organ toxicity (STOT) – repeated exposure	Not classified
Aspiration hazard	Not classified

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Viscosity, kinematic	27777.778 mm ² /s

Potential adverse human health effects and symptoms	No additional information available.
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SECTION 12: Ecological information

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-, 1,4-butanediyl ester (2082-81-7)	
LC50 - Other aquatic organisms [1]	9.79 mg/l
ErC50 algae	9.79 mg/l
NOEC (acute)	7.51 mg/l
NOEC (chronic)	20 mg/l
NOEC chronic crustacea	5.09 mg/l
NOEC chronic algae	2.11 mg/l
Partition coefficient n-octanol/water (Log Pow)	3.1

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'-(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

2,2'-(m-tolylimino)diethanol (91-99-6)	
Partition coefficient n-octanol/water (Log Pow)	1.9

12.2. Persistence and degradability

HIT-HY 200-R V3, A	
Persistence and degradability	Not established.
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	
Biodegradation	84 %
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
Not rapidly degradable	
Persistence and degradability	Readily biodegradable in water.

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12.3. Bioaccumulative potential

HIT-HY 200-R V3, A	
Bioaccumulative potential	Not established.
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	
Partition coefficient n-octanol/water (Log Pow)	3.1
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'-(p-tolylimino)dipropan-2-ol (38668-48-3)	
Partition coefficient n-octanol/water (Log Kow)	2.1
2,2'-(m-tolylimino)diethanol (91-99-6)	
Partition coefficient n-octanol/water (Log Pow)	1.9

12.4. Mobility in soil

HIT-HY 200-R V3, A	
Mobility in soil	No additional information available
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	
Partition coefficient n-octanol/water (Log Pow)	3.1
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
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)
Ecology - soil	Highly mobile in soil.
1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)	
Partition coefficient n-octanol/water (Log Kow)	2.1
2,2'-(m-tolylimino)diethanol (91-99-6)	
Partition coefficient n-octanol/water (Log Pow)	1.9

12.5. Other adverse effects

Ozone	Not classified
Other adverse effects	No additional information available

SECTION 13: Disposal information

13.1. Disposal methods

Product/Packaging disposal recommendations	After curing, the product can be disposed of with household waste. . Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. Packaging contaminated by the product : Dispose in a safe manner in accordance with local/national regulations.
Ecological information	Avoid release to the environment.

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SECTION 14: Transportation 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 hazardous chemical in question

Regulation	Component/ Mixture
EHS Notification and Registration Scheme	

15.2. International agreements

No additional information available

SECTION 16: Other information

Version	1.1
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Revision date	29/02/2024
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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
None.

Other information

Full text of H-statements	
H317	May cause an allergic skin reaction

SDS_MY_Hilti

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.