

# HIT-HY 200-R

## Safety Data Sheet

Compiled according to GB/T 16483, GB/T 17519

Version:3.0

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Supersedes: 2020/03/29

## SECTION 1 Chemical product and company identification

### Product identifier

Product form Mixture  
Product code BU Anchor  
Chemical Chinese name 锚固嵌缝剂 HIT-HY 200-R  
Chemical English name Injection Mortar HIT-HY 200-R



Recommended use of the chemical For professional use only  
Composite mortar component for fasteners in the construction industry

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

**Supplier**  
Hilti (China) Ltd.  
8F, Tower 2, No.58 Yao Yuan Rd.  
Pudong District  
200126 Shanghai - China  
T +86 21 6016 7316

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

### Emergency telephone number

Emergency number Schweizerisches Toxikologisches Informationszentrum -  
24h Service  
+41 44 251 51 51 (international)

Country	Organisation/Company	Address	Emergency number
China	中国境内化学事故应急咨询电话 / chemical accident emergency consultation service hotline (24/7)		+86 532 83889090

## SECTION 2 Hazards identification

### Emergency overview

Thixotropic paste. component A: grey, component B: white. Non flammable. Use personal protective equipment as required. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Equip cleanup crew with proper protection

### GHS hazard classification

Health hazards Serious eye damage/eye irritation, Category 2A  
Skin sensitization, Category 1  
Environmental hazards Hazardous to the aquatic environment - Acute hazard, Category 1

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Hazardous to the aquatic environment - Chronic hazard, Category 1

Other hazards not mentioned above are Not applicable or No data is available.

### Label elements

Hazard pictograms (GHS CN)



Signal word (GHS CN)

Warning.

Hazard statements (GHS CN)

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H410 - Very toxic to aquatic life with long lasting effects.

### Precautionary statements (GHS CN)

Prevention measures

P262 - Do not get in eyes, on skin, or on clothing.

P280 - Wear eye protection, protective clothing, protective gloves.

Incident response

P302+P351 - IF ON SKIN: Wash with plenty of water.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

Safe storage

P410+P403 - Protect from sunlight. Store in a well-ventilated place.

Disposal

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### Physical and chemical hazards

No additional information available

### Health hazards

May cause an allergic skin reaction

Causes serious eye irritation

Symptoms/effects after eye contact

May cause severe irritation

Symptoms/effects after skin contact

May cause an allergic skin reaction.

### Environmental hazards

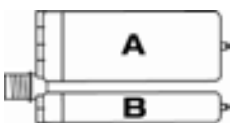
Very toxic to aquatic life with long lasting effects

### Other hazards

No additional information available

## SECTION 3 Composition/information on ingredients

Product form



Mixture.

2-Component-foilpack, contains:

Component A: Urethane methacrylate resin, inorganic filler

Component B: Dibenzoyl peroxide, phlegmatized

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A		
Ingredient(s)	Concentration or concentration ranges (w/w %)	CAS No.
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester	10 - 25	2082-81-7
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol	5 - 10	27813-02-1
1,1'-(p-tolylimino)dipropan-2-ol	0.1 - 1	38668-48-3
2,2'-(m-tolylimino)diethanol	0.1 - 1	91-99-6

B		
Ingredient(s)	Concentration or concentration ranges (w/w %)	CAS No.
dibenzoyl peroxide	10 - 25	94-36-0

## SECTION 4 First-aid measures

### 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

### Most important symptoms/effects

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

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### Advices for first aid responders

No additional information available

### Notes for the doctor

Other medical advice or treatment                      Treat symptomatically

## SECTION 5 Fire-fighting measures

### Extinguishing media

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

### Specific hazards

Hazardous decomposition products in case of fire	Thermal decomposition generates : Carbon dioxide Carbon monoxide
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### Advice for firefighters and protective 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

## SECTION 6 Accidental release measures

### Personal precautions, protective equipment and emergency procedures

General measures	Spilled material may present a slipping hazard
Personal Precautions, Protective Equipment and Emergency Procedures	No additional information available

### For non-emergency personnel

Emergency procedures	Evacuate unnecessary personnel
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### For emergency responders

Protective equipment	Equip cleanup crew with proper protection
Emergency procedures	Ventilate area

### Environmental precautions

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

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### Methods and material for containment and cleaning up

Methods for cleaning	No additional information available
For containment	Collect spillage.

### Prevention measures for secondary accidents

Prevention Measures for Secondary Accidents	No additional information available
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## SECTION 7 Handling and storage

### Handling

Precautions for safe handling	Wear personal protective equipment Avoid contact with skin and eyes Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work Provide good ventilation in process area to prevent formation of vapour
Hygiene measures	Do not eat, drink or smoke when using this product. Always wash hands after handling the product Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.
Local and general ventilation	No additional information available

### Storage

Storage conditions	Keep cool. Protect from sunlight.
Material used in packaging/containers	No additional information available
Incompatible products	Strong bases. Strong acids.
Incompatible materials	Sources of ignition. Direct sunlight.

## SECTION 8 Exposure controls / Personal protection equipment

### Occupational exposure limits

HIT-HY 200-R	
China - Occupational Exposure Limits	
Local name	过氧化苯甲酰 # Benzoyl peroxide
OEL PC-TWA	5 mg/m <sup>3</sup>
Regulatory reference	GBZ 2.1-2019

dibenzoyl peroxide (94-36-0)	
China - Occupational Exposure Limits	
Local name	过氧化苯甲酰 # Benzoyl peroxide
OEL PC-TWA	5 mg/m <sup>3</sup>
Regulatory reference	GBZ 2.1-2019

### Biological limit values

No additional information available



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Freezing point	Not applicable
Boiling point	Not applicable
Flash point	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	Non flammable.
Vapour pressure	No data available
Relative vapour density at 20 ° C	No data available
Density	1.8 - 1.9 g/cm <sup>3</sup>
Solubility	No data available
Partition coefficient n-octanol/water (Log Pow)	No data available
Lower explosive limit (LEL)	No data available
Upper explosive limit (UEL)	No data available
Radioactive	No

### SECTION 10 Stability and reactivity

Reactivity	No additional information available
Chemical stability	Not established
Possibility of hazardous reactions	Not established
Conditions to avoid	Direct sunlight. Extremely high or low temperatures
Incompatible materials	Strong acids Strong bases
Hazardous decomposition products	fume Carbon monoxide Carbon dioxide
Other properties	No additional information available

### SECTION 11 Toxicological information

#### Acute toxicity

Acute toxicity (oral)	No data available
Acute toxicity (dermal)	No data available
Acute toxicity (inhalation)	No data available

1,1'-(p-tolylimino)dipropan-2-ol	
LD50 oral rat	25 mg/kg
LD50 dermal rat	> 2000 mg/kg
ATE CN (oral)	25 mg/kg bodyweight

2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester	
LD50 oral rat	10066 mg/kg
LD50 dermal rat	> 3000 mg/kg
ATE CN (oral)	10066 mg/kg bodyweight

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2,2'-(m-tolylimino)diethanol	
LD50 oral rat	300 - 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg
ATE CN (oral)	500 mg/kg bodyweight

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol	
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)

### Skin corrosion/irritation

Skin corrosion/irritation No data available

### Serious eye damage/eye irritation

Serious eye damage/irritation Causes serious eye irritation.

### Respiratory or skin sensitisation

Respiratory or skin sensitisation May cause an allergic skin reaction.

### Germ cell mutagenicity

Germ cell mutagenicity No data available

### Carcinogenicity

Carcinogenicity No data available

dibenzoyl peroxide	
IARC group	3 - Not classifiable

### Reproductive toxicity

Reproductive toxicity No data available

### STOT - single exposure

STOT-single exposure No data available

### STOT - repeated exposure

STOT-repeated exposure No data available

2,2'-(m-tolylimino)diethanol	
STOT-repeated exposure	May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).

### Aspiration hazard

Aspiration hazard : No data available

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Density	1.8 - 1.9 g/cm <sup>3</sup>

## SECTION 12 Ecological information

### Ecotoxicity



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Ecology - water	Very toxic to aquatic life.
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.

1,1'-(p-tolylimino)dipropan-2-ol	
LC50 - Fish [1]	≈ 17 mg/l
EC50 - Crustacea [1]	28.8 mg/l
Partition coefficient n-octanol/water (Log Kow)	2.1

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol	
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)

dibenzoyl peroxide	
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 chronic fish	0.001 mg/l

### Persistence and degradability

HIT-HY 200-R	
Persistence and degradability	Not established

2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester	
Not rapidly degradable	Yes
Biodegradation	84 %

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol	
Not rapidly degradable	Yes
Persistence and degradability	Readily biodegradable in water

dibenzoyl peroxide	
Persistence and degradability	Readily biodegradable in water Not established May cause long-term adverse effects in the environment

### Bioaccumulative potential

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Bioaccumulative potential	Not established

1,1'-(p-tolylimino)dipropan-2-ol	
Partition coefficient n-octanol/water (Log Kow)	See section 12.1 on ecotoxicology

2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester	
Partition coefficient n-octanol/water (Log Pow)	3.1

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

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol	
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500)
BCF - Fish [1]	See section 12.1 on ecotoxicology
BCF - Fish [2]	See section 12.1 on ecotoxicology
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)

dibenzoyl peroxide	
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4)
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)

### Mobility in soil

HIT-HY 200-R	
Ecology - soil	Not established

1,1'-(p-tolylimino)dipropan-2-ol	
Partition coefficient n-octanol/water (Log Kow)	See section 12.1 on ecotoxicology

2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester	
Partition coefficient n-octanol/water (Log Pow)	3.1

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

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2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol	
Ecology - soil	Low bioaccumulation potential (BCF < 500)
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)

dibenzoyl peroxide	
Ecology - soil	Low bioaccumulation potential (Log Kow < 4)
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)

### Other adverse effects

Classification procedure (Ozone)

No data available

Other information

Avoid release to the environment.

## SECTION 13 Disposal considerations

Waste treatment methods

No additional information available

Contaminated container and packaging

No additional information available

Additional information

No additional information available

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.

Regional legislation (waste)

Disposal must be done according to official regulations

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID

ADR	IMDG	IATA	RID
<b>14.1. UN number</b>			
UN 3077	UN 3077	UN 3077	UN 3077

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ADR	IMDG	IATA	RID
<b>14.2. UN proper shipping name</b>			
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
<b>14.3. Transport hazard class(es)</b>			
9	9	9	9
<b>14.4. Packing group</b>			
III	III	III	III
<b>14.5. Environmental hazards</b>			
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

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Stowage category (IMDG)	A
Stowage and handling (IMDG)	SW23
<b>Air transport</b>	
PCA packing instructions (IATA)	956
PCA max net quantity (IATA)	400kg
CAO packing instructions (IATA)	956
Special provisions (IATA)	A97, A158, A179, A197, A215
<b>Rail transport</b>	
Special provisions (RID)	274, 335, 375, 601
Limited quantities (RID)	5kg
Packing instructions (RID)	P002, IBC08, LP02, R001

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

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### SECTION 15 Regulatory information

New Chemical Substance Environmental Management Registration Measures (MEE Order 12 of 2020)

Inventory of Existing Chemical Substances in : Listed

China (IECSC)

Regulations on the Safe Management of Hazardous Chemicals (Decree 591 of the State Council)

Catalogue of Hazardous Chemicals (2015) : Listed

Identification of major hazard installations : Not listed

for dangerous chemicals (GB 18218)

Catalogue of Severely Restricted Toxic : Not listed

Chemicals

Catalogue of Explosive Precursor Dangerous : Not listed

Chemicals

Catalogue of Hazardous Chemicals Prohibited : Not listed

from Inland Waterway Transport

Law of the People's Republic of China on the Prevention and Control of Occupational Diseases

Catalogue for Classification of Hazardous : Listed

Factors of Occupational Diseases

List of Highly Toxic Substances : Not listed

Regulations on Administration of Chemicals Subjected to Supervision and Control

Catalogue of Controlled Chemicals : Not listed

Regulation on the Administration of Precursor Chemicals (Decree 445 of the State Council)

Catalogue of Precursor Chemicals : Not listed

Regulations on Administration of Ozone Depleting Substances (Decree 573 of the State Council)

List of Ozone-Depleting Substances under : Not listed

Control in China

Other domestic regulatory lists

Dangerous Goods List (GB 12268-2012) : Listed

List of Export Control of Chemical Agents and : Not listed

Related Equipment and Technologies

List of Goods Prohibited from Export (No. 3) : Not listed

or Import (No.6)

Inventory of Hazardous Chemicals under Key : Listed

Supervision

### SECTION 16 Other information

#### 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

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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

**Indication of changes**

Section	Changed item	Change	Comments
1.	Emergency number.	Modified.	
14.	Transportation information.	Added.	
2.	Classification (GHS CN).	Modified.	
3.	Composition/information on ingredients.	Modified.	



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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.*