

HIT-HY 200-A V3

Safety information for 2-Component-products

Issue date: 13/04/2023

Revision date: 13/04/2023

Version: 1.0

SECTION 1: Kit identification

1.1 Product identifier

Product name

HIT-HY 200-A V3



Product code

BU Anchor

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

Hilti (South Africa) (Pty) Ltd.
2 Tugela Lane, Waterfall Logistics Precinct
Corner Bridal Veil Road and R101
2090 Midrand - South Africa
T +2711 237300 - F +2711 2373111
Customercare.za@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:

Classification of the Product

Classification according to the United Nations GHS

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

Label elements

Labelling according to the United Nations GHS

Hazard pictograms (GHS UN)



GHS07

GHS09

Signal word (GHS UN)

Warning

Hazardous ingredients

methacrylates, dibenzoyl peroxide

Hazard statements (GHS UN)

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 UN)

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.

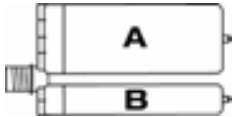
HIT-HY 200-A V3

Safety information for 2-Component-products

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 the United Nations GHS |
|--------------------|---------------------|----------|--------------|--|
| HIT-HY 200-A V3, B | | 1 | pcs (pieces) | Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 |
| HIT-HY 200-A V3, A | | 1 | pcs (pieces) | Skin Sens. 1, H317 |

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 |

HIT-HY 200-A V3

Safety information for 2-Component-products

| | |
|---------------------------------------|---|
| First-aid measures after skin contact | Wash contaminated clothing before reuse. Wash with plenty of water/... |
| First-aid measures general | If skin irritation or rash occurs: Get medical advice/attention. 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 | Causes serious eye 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 200-A V3, A

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

Issue date: 13/04/2023 Revision date: 13/04/2023 : Version: 1.0

SECTION 1: Identification

1.1. GHS Product identifier

| | |
|--------------|--------------------|
| Product form | Mixture |
| Product name | HIT-HY 200-A V3, 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

| | |
|-----------------------------------|---|
| Use of the substance/mixture | Composite mortar component for fasteners in the construction industry |
| Recommended uses and restrictions | For professional use only |

1.4. Supplier's details

Supplier

Hilti (South Africa) (Pty) Ltd.
2 Tugela Lane, Waterfall Logistics Precinct Corner Bridal Veil Road and R101
ZA- 2090 Midrand
South Africa
T +2711 237300 - F +2711 2373111
Customercare.za@hilti.com

Department issuing data specification sheet

Hilti Entwicklungsgesellschaft mbH
Hiltistraße 6
DE- 86916 Kaufering
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) +2711 237300 |
|------------------|---|

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

| | | |
|---|------|--------------------|
| Skin sensitisation, Category 1 | H317 | Calculation method |
| Full text of H-statements: see section 16 | | |

2.2. GHS Label elements, including precautionary statements

Labelling according to the United Nations GHS

Hazard pictograms (GHS UN)



Signal word (GHS UN)

Warning

Hazardous ingredients

2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester, 2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol

Hazard statements (GHS UN)

H317 - May cause an allergic skin reaction

Precautionary statements (GHS UN)

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.

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

HIT-HY 200-A V3, A

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

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

P302+P352 - IF ON SKIN: Wash with plenty of water.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to the United Nations GHS |
|---|---------------------|---------|---|
| 2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester | CAS-No.: 2082-81-7 | 10 – 25 | Acute toxicity (oral) Not classified Skin sensitisation, category 1B, H317 |
| 2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol | CAS-No.: 27813-02-1 | 5 - 8 | Flammable liquids Not classified Acute toxicity (oral) Not classified Serious eye damage/eye irritation, Category 2A, H319 Skin sensitisation, Category 1, H317 |
| 1,1'-(p-tolylimino)dipropan-2-ol | CAS-No.: 38668-48-3 | 0,1 – 1 | Acute toxicity (oral), Category 2, H300 Serious eye damage/eye irritation, Category 2A, H319 Hazardous to the aquatic environment – Acute Hazard, Category 3, H402 Hazardous to the aquatic environment – Chronic Hazard, Category 3, H412 |

Full text of H-statements: see section 16

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. |
| Potential adverse human health effects and symptoms | No additional information available. |

HIT-HY 200-A V3, A

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

4.3. Indication of immediate medical attention and special treatment needed, if necessary

No additional information available

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. Specific hazards arising from the chemical

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

5.3. Special protective actions 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. |
| Other information | Dispose of materials or solid residues at an authorized site. |

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 |

HIT-HY 200-A V3, A

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

| | |
|---------------------------------|------------------------|
| Relative density | Not available |
| Relative vapour density at 20°C | Not applicable |
| Solubility | Water: Not miscible |
| Viscosity, dynamic | 35 – 65 Pa·s (HN-0333) |
| Particle size | Not available |

9.2. Data relevant with regard to physical hazard classes (supplemental)

| | |
|----------------------|--------------------------|
| Explosive properties | Product is not explosive |
|----------------------|--------------------------|

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. 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 |

| 1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3) | |
|---|---|
| LD50 oral rat | 25 mg/kg |
| LD50 dermal rat | > 2000 mg/kg |
| 2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7) | |
| LD50 oral rat | 10066 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) |

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

HIT-HY 200-A V3, A

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

| | |
|---|--------------------------------------|
| STOT-repeated exposure | Not classified |
| Aspiration hazard | Not classified |
| Potential adverse human health effects and symptoms | No additional information available. |

SECTION 12: Ecological information

12.1. Toxicity

| | |
|---|----------------|
| Hazardous to the aquatic environment, short-term (acute) | Not classified |
| Hazardous to the aquatic environment, long-term (chronic) | Not classified |

| 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 |

| 2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7) | |
|--|-----------|
| LC50 - Other aquatic organisms [1] | 9,79 mg/l |
| NOEC (acute) | 7,51 mg/l |
| NOEC (chronic) | 20 mg/l |

| 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) |
| 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) |

12.2. Persistence and degradability

| HIT-HY 200-A V3, A | |
|---|---------------------------------|
| Persistence and degradability | Not established. |
| 2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7) | |
| Not rapidly degradable | |
| 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. |

12.3. Bioaccumulative potential

| HIT-HY 200-A V3, A | |
|--|------------------|
| Bioaccumulative potential | Not established. |
| 1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3) | |
| Partition coefficient n-octanol/water (Log Pow) | 2,1 |

HIT-HY 200-A V3, A

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

| 2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7) | |
|---|---|
| Partition coefficient n-octanol/water (Log Kow) | 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 Kow) | 0,97 (OECD 102 method) |
| Bioaccumulative potential | Low bioaccumulation potential (BCF < 500). |

12.4. Mobility in soil

| HIT-HY 200-A V3, A | |
|---|-------------------------------------|
| Mobility in soil | No additional information available |
| 2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1) | |
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 1,9 (log Koc, Calculated value) |
| Ecology - soil | Highly mobile in soil. |

12.5. Other adverse effects

| | |
|-----------------------|-------------------------------------|
| Ozone | Not classified |
| Other adverse effects | No additional information available |
| Other information | Avoid release to the environment. |

SECTION 13: Disposal considerations

13.1. Disposal methods

| | |
|--|--|
| Regional legislation (waste) | Disposal must be done according to official regulations. |
| Product/Packaging disposal recommendations | After curing, the product can be disposed of with household waste. . Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. Packaging contaminated by the product : Dispose in a safe manner in accordance with local/national regulations. |
| Ecology - waste materials | Avoid release to the environment. |

SECTION 14: Transport information

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 |



HIT-HY 200-A V3, A

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

| ADR | IMDG | IATA | RID |
|--|------|------|-----|
| 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

No additional information available

SECTION 16: Other information

Issue date 13/04/2023

Revision date 13/04/2023

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



HIT-HY 200-A V3, A

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

Other information vPvB - Very Persistent and Very Bioaccumulative
None.

| Full text of H-statements: | |
|----------------------------|---|
| H300 | Fatal if swallowed |
| H317 | May cause an allergic skin reaction |
| H319 | Causes serious eye irritation |
| H402 | Harmful to aquatic life |
| H412 | Harmful to aquatic life with long lasting effects |

SDS_UN_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-A V3, B

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

Issue date: 13/04/2023 Revision date: 13/04/2023 : Version: 1.0

SECTION 1: Identification

1.1. GHS Product identifier

| | |
|--------------|--------------------|
| Product form | Mixture |
| Product name | HIT-HY 200-A V3, B |
| UN-No. (ADR) | 3077 |
| 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

| | |
|-----------------------------------|---|
| Use of the substance/mixture | Composite mortar component for fasteners in the construction industry |
| Recommended uses and restrictions | For professional use only |

1.4. Supplier's details

Supplier

Hilti (South Africa) (Pty) Ltd.
2 Tugela Lane, Waterfall Logistics Precinct Corner Bridal Veil Road and R101
ZA- 2090 Midrand
South Africa
T +2711 237300 - F +2711 2373111
Customercare.za@hilti.com

Department issuing data specification sheet

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Hiltistraße 6
DE- 86916 Kaufering
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) +2711 237300 |
|------------------|---|

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

| | | |
|---|------|--------------------|
| Serious eye damage/eye irritation, Category 2 | H319 | Calculation method |
| Skin sensitisation, Category 1 | H317 | Calculation method |
| Hazardous to the aquatic environment – Acute Hazard, Category 1 | H400 | Calculation method |
| Hazardous to the aquatic environment – Chronic Hazard, Category 1 | H410 | Calculation method |
| Full text of H-statements: see section 16 | | |

2.2. GHS Label elements, including precautionary statements

Labelling according to the United Nations GHS

Hazard pictograms (GHS UN)



Signal word (GHS UN)

Warning

Hazardous ingredients

dibenzoyl peroxide

Hazard statements (GHS UN)

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-A V3, B

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

Precautionary statements (GHS UN)

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.
 P333+P313 - If skin irritation or rash occurs: Get medical advice, medical attention.
 P337+P313 - If eye irritation persists: Get medical advice, medical attention.
 P302+P352 - IF ON SKIN: Wash with plenty of water.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to the United Nations GHS |
|--------------------|--------------------|---------|--|
| dibenzoyl peroxide | CAS-No.: 94-36-0 | 10 - 15 | Organic Peroxides, Type B, H241 Serious eye damage/eye irritation, Category 2, H319 Skin sensitisation, Category 1, H317 Hazardous to the aquatic environment – Acute Hazard, Category 1, H400 (M=10) Hazardous to the aquatic environment – Chronic Hazard, Category 1, H410 (M=10) |

Full text of H-statements: see section 16

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

No additional information available

HIT-HY 200-A V3, B

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

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. Specific hazards arising from the chemical

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

5.3. Special protective actions 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.
Other information Dispose of materials or solid residues at an authorized site.

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/personal protection

8.1. Control parameters

No additional information available

HIT-HY 200-A V3, B

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

8.2. Appropriate engineering controls

| | |
|----------------------------------|---|
| Appropriate engineering controls | Ensure adequate ventilation. |
| Environmental exposure controls | Not applicable. |
| Consumer exposure controls | Avoid contact during pregnancy/while nursing. |
| Other information | Do not eat, drink or smoke during use. |

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

| | |
|-----------------------------------|---|
| Materials for protective clothing | Long sleeved protective clothing |
| 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)



8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

| | |
|---|----------------------------|
| Physical state | Solid |
| Appearance | Thixotropic paste |
| Colour | white. |
| Odour | characteristic. |
| Odour threshold | Not determined |
| Melting point | Not available |
| Freezing point | Not available |
| Boiling point | 100 °C |
| Flammability | Flammable |
| Lower explosion limit | Not applicable |
| Upper explosion limit | Not applicable |
| Flash point | Not applicable |
| Auto-ignition temperature | Not self-igniting |
| Decomposition temperature | Not available |
| SADT | 65 °C dibenzoyl peroxide |
| pH | 6 – 7 |
| pH solution | Not available |
| Viscosity, kinematic (calculated value) (40 °C) | Not applicable |
| Partition coefficient n-octanol/water (Log Kow) | Not available |
| Vapour pressure | 23 hPa |
| Vapour pressure at 50°C | Not available |
| Density | 1,9 g/cm ³ |
| Relative density | Not available |
| Relative vapour density at 20°C | Not applicable |
| Solubility | Water: Miscible with water |

HIT-HY 200-A V3, B

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

| | |
|--------------------|----------------------|
| Viscosity, dynamic | 25 – 55 Pa·s HN-0333 |
| Particle size | Not available |

9.2. Data relevant with regard to physical hazard classes (supplemental)

| | |
|----------------------|--------------------------|
| Explosive properties | Product is not explosive |
|----------------------|--------------------------|

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. 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/irritation | Not classified pH: 6 – 7 |
| Serious eye damage/irritation | Causes serious eye irritation. pH: 6 – 7 |
| 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 |

SECTION 12: Ecological information

12.1. Toxicity

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

HIT-HY 200-A V3, B

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

| 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 |

12.2. Persistence and degradability

| HIT-HY 200-A 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-A V3, B | |
|---|--|
| Bioaccumulative potential | Not established. |
| dibenzoyl peroxide (94-36-0) | |
| Partition coefficient n-octanol/water (Log Kow) | 3,71 |
| Bioaccumulative potential | Low bioaccumulation potential (Log Kow < 4). |

12.4. Mobility in soil

| HIT-HY 200-A V3, B | |
|--|--|
| Mobility in soil | No additional information available |
| dibenzoyl peroxide (94-36-0) | |
| Surface tension | No data available (test not performed) |
| 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 |
| Other information | Avoid release to the environment. |

SECTION 13: Disposal considerations

13.1. Disposal methods

| | |
|--|--|
| Regional legislation (waste) | Disposal must be done according to official regulations. |
| Product/Packaging disposal recommendations | After curing, the product can be disposed of with household waste. . Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. Packaging contaminated by the product : Dispose in a safe manner in accordance with local/national regulations. |
| Ecology - waste materials | Avoid release to the environment. |

HIT-HY 200-A V3, B

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

SECTION 14: Transport information

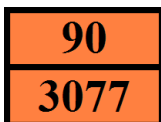
In accordance with ADR / IMDG / IATA / RID

| 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 | | | |

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 | |





HIT-HY 200-A V3, B

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

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 |
| MFAG-No | 171 |

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

No additional information available

SECTION 16: Other information

| | |
|-----------------|------------|
| SDS Major/Minor | None |
| Issue date | 13/04/2023 |
| Revision date | 13/04/2023 |

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



HIT-HY 200-A V3, B

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

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: | |
|----------------------------|--|
| H241 | Heating may cause a fire or explosion |
| 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_UN_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.