

HIT-HY 200-R V3 330/2

HIT-HY 200-R V3 500/2

Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

2.2. GHS Label elements, including precautionary statements

Labelling according to the United Nations GHS

Hazard pictograms (GHS UN)



GHS07

GHS09

Signal word (GHS UN)

Warning

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.

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

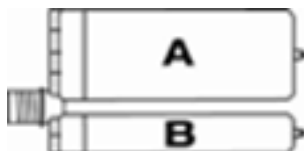
No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures



2-Component-foilpack, contains:

Component A: Urethane methacrylate resin, inorganic filler

Component B: Dibenzoyl peroxide, phlegmatized

| A | | | |
|---|----------------------|---------|---|
| Name | Product identifier | % | Classification according to the United Nations GHS |
| 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 |
| 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 |
| 2,2'-(m-tolylimino)diethanol | (CAS-No.) 91-99-6 | 0.1 - 1 | Flammable liquids Not classified Acute toxicity (oral), Category 3, H301 Acute toxicity (dermal), Category 4, H312 Serious eye damage/eye irritation, Category 2A, H319 |
| 2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol | (CAS-No.) 27813-02-1 | 5 - 10 | Flammable liquids Not classified Acute toxicity (oral) Not classified Serious eye damage/eye irritation, Category 2A, H319 Skin sensitisation, Category 1, H317 |

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| | | | Hazardous to the aquatic environment — Acute Hazard, Category 3, H402 Hazardous to the aquatic environment — Chronic Hazard, Category 3, H412 |
|--------------------|--------------------|---------|---|
| B | | | |
| Name | Product identifier | % | Classification according to the United Nations GHS |
| dibenzoyl peroxide | (CAS-No.) 94-36-0 | 10 - 25 | Organic Peroxides, Type B, H241 Serious eye damage/eye irritation, Category 2A, 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. |
| Potential adverse human health effects and symptoms | Based on available data, the classification criteria are not met. |

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 | Foam. Dry powder. Carbon dioxide. Water spray. 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. |
|---------------------------|---|

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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

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.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Environmental exposure controls

Avoid release to the environment.

Consumer exposure controls

Avoid contact during pregnancy/while nursing.

Other information

Do not eat, drink or smoke during use.

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

Hand protection

Wear protective gloves.

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

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| Eye protection | | Chemical goggles or safety glasses | |
|---|---------|------------------------------------|----------------|
| Type | Use | Characteristics | Standard |
| Safety glasses | Droplet | clear | EN 166, EN 170 |
| Skin and body protection | | Wear suitable protective clothing | |
| Respiratory protection | | Wear appropriate mask | |
| 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 | component A: black, component B: white. |
| Odour | characteristic. |
| Odour threshold | Not available |
| Melting point | Not available |
| Freezing point | Not available |
| Boiling point | Not available |
| Flammability (solid, gas) | Non flammable. |
| Explosive limits | Not applicable |
| Lower explosive limit (LEL) | Not applicable |
| Upper explosive limit (UEL) | Not applicable |
| Flash point | Not applicable |
| Auto-ignition temperature | Not applicable |
| Decomposition temperature | Not available |
| pH | Not available |
| pH solution | Not available |
| Viscosity, kinematic (calculated value) (40 °C) | Not applicable |
| Partition coefficient n-octanol/water (Log Kow) | Not available |
| Vapour pressure | Not available |
| Vapour pressure at 50 °C | Not available |
| Density | Component A: 1.8 g/cm ³ ; component B: 1.9 g/cm ³ |
| Relative density | Not available |
| Relative vapour density at 20 °C | Not applicable |
| Solubility | Not available |
| Particle size | Not available |
| Particle size distribution | Not available |

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| | |
|--------------------------------|---------------|
| Particle shape | Not available |
| Particle aspect ratio | Not available |
| Particle specific surface area | Not available |

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

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

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.

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 | Causes serious eye irritation. |
| 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 |

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| | |
|---|---|
| Aspiration hazard | Not classified |
| Potential adverse human health effects and symptoms | Based on available data, the classification criteria are not met. |

SECTION 12: Ecological information

12.1. Toxicity

| | |
|---|---|
| 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. |

| | |
|--|--|
| dibenzoyl peroxide (94-36-0) | |
| LC50 fish 2 | 0.0602 mg/l (96h; Oncorhynchus mykiss; ECHA) |
| EC50 Daphnia 1 | 0.11 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, 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 |
| 1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3) | |
| LC50 fish 1 | ≈ 17 mg/l |
| LC50 other aquatic organisms 1 | 245 mg/l |
| EC50 Daphnia 1 | 28.8 mg/l |
| NOEC (acute) | 57.8 mg/l |
| 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 Daphnia 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-R V3 | |
| 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. |
| 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. |

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12.3. Bioaccumulative potential

| | |
|--|---|
| HIT-HY 200-R V3 | |
| 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). |
| 1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3) | |
| BCF fish 1 | ≈ |
| Partition coefficient n-octanol/water (Log Pow) | 2.1 |
| 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-R V3 | |
| 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 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. |
| 2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1) | |
| Partition coefficient n-octanol/water (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 / RID / IMDG / IATA / ADN

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| ADR | IMDG | IATA | RID |
|--|----------------|----------------|----------------|
| 14.1. UN number | | | |
| Not applicable | Not applicable | Not applicable | Not applicable |
| 14.2. UN proper shipping name | | | |
| Not applicable | Not applicable | Not applicable | Not applicable |
| 14.3. Transport hazard class(es) | | | |
| Not applicable | Not applicable | Not applicable | Not applicable |
| 14.4. Packing group | | | |
| Not applicable | Not applicable | Not applicable | Not applicable |
| 14.5. Environmental hazards | | | |
| Not applicable | Not applicable | Not applicable | Not applicable |
| 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. | | | |
| No supplementary information available | | | |

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Rail transport

Not applicable

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

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

Other information

None.

| Full text of H-statements: | |
|----------------------------|---------------------------------------|
| H241 | Heating may cause a fire or explosion |
| H300 | Fatal if swallowed |
| H301 | Toxic if swallowed |
| H312 | Harmful in contact with skin |



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| | |
|------|--|
| H317 | May cause an allergic skin reaction |
| H319 | Causes serious eye irritation |
| H400 | Very toxic to aquatic life |
| H402 | Harmful to aquatic life |
| H410 | Very toxic to aquatic life with long lasting effects |
| H412 | Harmful to aquatic life with long lasting effects |

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.