according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : Carsystem Multi Black Rapid

Product code : 159.755

This substance/ mixture contains nanoforms

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Sub- : Body filler/stopper

stance/Mixture

Recommended restrictions

on use

: Industrial use, professional use

1.3 Details of the supplier of the safety data sheet

Company : JASA AG

Müslistrasse 43 8957 Spreitenbach

Schweiz

info@jasa-ag.ch, www.jasa-ag.ch

Telephone : +41 (0)44 431 60 70 Telefax : +41 (0)44 432 63 17

Responsible Department : Productmanagement, Tel: +41 (0)44 431 60 70, sds@jasa-ag.ch

1.4 Emergency telephone

Telephone : Tox Info Suisse (STIZ), Tel: 145

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 3 H226: Flammable liquid and vapor.

Skin irritation, Category 2 H315: Causes skin irritation.

Eye irritation, Category 2 H319: Causes serious eye irritation.

Skin sensitization, Category 1 H317: May cause an allergic skin reaction.

Reproductive toxicity, Category 2 H361d: Suspected of damaging the unborn child.

Specific target organ toxicity - repeated

exposure, Category 1

H372: Causes damage to organs through pro-

longed or repeated exposure.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms







Signal Word : Danger

Hazard Statements : H226 Flammable liquid and vapor.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H361d Suspected of damaging the unborn child.

H372 Causes damage to organs through prolonged or

repeated exposure.

Precautionary Statements : Prevention:

P201 Obtain special instructions before use.

P210 Keep away from heat, hot surfaces, sparks, open

flames and other ignition sources. No smoking.

P260 Do not breathe dust / mist / vapours.

P280 Wear protective gloves/ protective clothing/ eye

protection/ face protection.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with wa-

ter for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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attention.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved

facility in accordance with local, regional, national

and international regulations.

Hazardous ingredients which must be listed on the label:

styrene

maleic anhydride

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Resin Mixture

Components

| Chemical name | CAS-No. EC-No. Index-No. Registration number | Classification | Concentration (% w/w) |
|---------------|---|---|--------------------------|
| styrene | 100-42-5 202-851-5 601-026-00-0 01-2119457861-32 | Flam. Liq. 3; H226 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Repr. 2; H361d STOT SE 3; H335 (Respiratory system) STOT RE 1; H372 (hearing organs) Asp. Tox. 1; H304 Aquatic Chronic 3; H412 | >= 10 - < 20 |

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| maleic anhydride | 108-31-6 203-571-6 607-096-00-9 01-2119472428-31 | Acute toxicity estimate Acute inhalation toxicity (vapor): 11,8 mg/l Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 Resp. Sens. 1; H334 Skin Sens. 1A; H317 STOT RE 1; H372 (Respiratory system) EUH071 specific concentration limit Skin Sens. 1A; H317 >= 0,001 % Acute toxicity estimate Acute oral toxicity: 1.090 mg/kg | >= 0,001 - < 0,1 |
|----------------------------------|---|--|---------------------|
| Substances with a workplace expo | | | |
| Talc | 14807-96-6 238-877-9 | | >= 30 - < 50 |
| Copper chromite black spinel | 68186-91-4 269-053-7 01-2119966123-40 | | >= 1 - < 10 |
| Silicon dioxide | 7631-86-9 231-545-4 01-2119379499-16 | | >= 1 - < 10 |

For explanation of abbreviations see section 16.

This substance/ mixture contains nanoforms

Components:

Silicon dioxide:

Particle characteristics

Particle size : 2,5 - 50 nm

single particles, (D50, number distribution), Transmission Electron Microscopy / Electron Microscopy (TEM/EM) calcula-

tion

Particle Size Distribution : Product characteristics, Substance, Contains agglomerates /

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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aggregates of nanoparticles

Assessment : This substance/ mixture contains nanoforms

Shape : Shape: spheres

Crystallinity : Crystallinity: amorphous

Surface treatment /Coatings : Surface treatment /Coatings: no

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice : In the case of accident or if you feel unwell, seek medical ad-

vice immediately.

Move out of dangerous area.

Take off contaminated clothing and shoes immediately.

Do not leave the victim unattended.

Symptoms of poisoning may appear several hours later. Show this material safety data sheet to the doctor in attend-

ance.

Protection of first-aiders : First Aid responders should pay attention to self-protection

and use the recommended protective clothing

If inhaled : Move to fresh air.

Keep patient warm and at rest.

If breathing is irregular or stopped, administer artificial respira-

tion.

Call a physician immediately.

In case of skin contact : Wash off immediately with soap and plenty of water while

removing all contaminated clothes and shoes. Call a physician if irritation develops or persists.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,

for at least 15 minutes.

Keep eye wide open while rinsing.

If easy to do, remove contact lens, if worn.

Consult a physician.

If swallowed : Rinse mouth with water.

Do NOT induce vomiting. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Risks : Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

Suspected of damaging the unborn child.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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Causes damage to organs through prolonged or repeated

exposure.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

Keep under medical supervision for at least 48 hours.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Carbon dioxide (CO2)

Dry powder Water spray jet Alcohol-resistant foam

Unsuitable extinguishing

media

High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire

fighting

Build-up of dangerous/toxic fumes possible in cases of

fire/high temperature.

Hazardous combustion prod: :

ucts

Hazardous decomposition products due to incomplete com-

bustion

Carbon monoxide, carbon dioxide and unburned hydrocar-

bons (smoke).

5.3 Advice for firefighters

Special protective equipment :

for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

Further information : Use water spray to cool unopened containers.

Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Wear personal protective equipment.

Evacuate personnel to safe areas.

Ensure adequate ventilation, especially in confined areas.

Remove all sources of ignition.

Do not smoke.

Avoid contact with skin, eyes and clothing. Sweep up to prevent slipping hazard.

In the case of vapor formation use a respirator with an ap-

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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proved filter.

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.

Local authorities should be advised if significant spillages

cannot be contained.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

Do not flush with water.

6.4 Reference to other sections

For personal protection see section 8., For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Keep container closed when not in use.

Provide sufficient air exchange and/or exhaust in work rooms.

Wear personal protective equipment. Avoid contact with skin and eyes.

Avoid the inhalation of dust, particulates, spray or mist arising

from the application of this mixture. Avoid inhalation of dust from sanding.

Advice on protection against

fire and explosion

Vapors may form explosive mixtures with air. Keep away from

open flames, hot surfaces and sources of ignition. Do not smoke. Take measures to prevent the build up of electrostatic

charge. Use explosion-proof equipment.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Store in original container. Keep containers tightly closed in a

dry, cool and well-ventilated place.

Further information on stor-

age conditions

Keep away from heat and sources of ignition. Protect from

moisture. Keep away from direct sunlight. Do not store at

temperatures above 30 °C / 86 °F.

Advice on common storage : Incompatible with oxidizing agents.

Keep away from food and drink.

Storage class (TRGS 510) : 3

7.3 Specific end use(s)

Specific use(s) : No data available

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

| Components | CAS-No. | Value type (Form | Control parameters | Basis | |
|-----------------|--|---|--|------------------|--|
| · | | of exposure) | · | | |
| Talc | 14807-96-6 | AGW (Inhalable fraction) | 10 mg/m3 | DE TRGS 900 | |
| | Peak-limit cat | egory: 2;(II) | | | |
| | | | compliance with the OEL a | nd biological | |
| | tolerance valu | | of harming the unborn child | | |
| | | AGW (Alveolate | 1,25 mg/m3 | DE TRGS | |
| | | fraction) | | 900 | |
| | Peak-limit cat | | | | |
| | | | s compliance with the OEL a of harming the unborn child | nd biological | |
| | | TWA (Respirable | 0,1 mg/m3 | 2004/37/EC | |
| | | dust) | | | |
| | Further inform | nation: Carcinogens | | . | |
| | | BM (Alveolar | 0,5 mg/m3 | DE TRGS | |
| | | dust fraction) | | 527 | |
| styrene | 100-42-5 | AGW | 20 ppm | DE TRGS | |
| | Deal Park and | 0 (11) | 86 mg/m3 | 900 | |
| | Peak-limit category: 2;(II) | | | | |
| | Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child | | | | |
| | tolerance valu | MAK | | DE DFG MAK | |
| | | IVIAN | 20 ppm 86 mg/m3 | DE DEG MAK | |
| | Further information: Substances that cause cancer in humans or animals or | | | | |
| | that are considered to be carcinogenic for humans and for which a MAK value | | | | |
| | can be derived, Damage to the embryo or foetus is unlikely when the MAK | | | | |
| | value or the BAT value is observed | | | | |
| Copper chromite | 68186-91-4 | AGW (Inhalable | 2 mg/m3 | DE TRGS | |
| black spinel | Dook limit oot | fraction) | (chromium) | 900 | |
| | Peak-limit cat | AGW (Inhalable | 0.2 mg/m2 | DE TROS | |
| | | fraction) | 0,2 mg/m3 | DE TRGS 900 | |
| | , , , | | | | |
| | Peak-limit category: 8;(II) Further information: For Permanganates an excursion factor of 1(II) applies., | | | | |
| | When there is compliance with the OEL and biological tolerance values, there | | | | |
| | is no risk of harming the unborn child | | | | |
| | | AGW (Alveolate | 0,02 mg/m3 | DE TRGS | |
| | | fraction) | (Manganese) | 900 | |
| | Peak-limit cat | | | | |
| | | | anates an excursion factor o | | |
| | | s compliance with the arming the unborn ch | e OEL and biological tolerand hild | ce values, there | |
| | | MAK (measured | 0,01 mg/m3 | DE DFG MAK | |
| | | as the alveolate | | | |
| | | fraction) | | | |
| | | | | | |

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| | Further inforn | nation: Damage to th | e embryo or foetus is unlikel | y when the | | |
|---|--|--|--|--|--|--|
| | MAK value or | the BAT value is ob | served | • | | |
| | | MAK (measured as the alveolate fraction) | 0,02 mg/m3 | DE DFG MAK | | |
| | | | e embryo or foetus is unlikel served, Permanganates: Pe | | | |
| | | MAK (inhalable fraction) | 0,2 mg/m3 | DE DFG MAK | | |
| | | the BAT value is ob | e embryo or foetus is unlikel served, Permanganates: Pe | | | |
| | | Tolerable con- centration (inhal- able fraction) | 1 microgram per cubic meter (Cr(VI): Hexavalent chromium) | DE TRGS 910 | | |
| | Peak-limit cat | egory: 8 - Excursion | factor according to Number | 3.2.6 | | |
| | | TWA (inhalable fraction) | 0,2 mg/m3 (Manganese) | 2017/164/EU | | |
| | Further information: Indicative | | | | | |
| | | TWA (Respirable fraction) | 0,05 mg/m3 (Manganese) | 2017/164/EU | | |
| | Further information: Indicative | | | | | |
| Silicon dioxide | 7631-86-9 | TWA (Respirable dust) | 0,1 mg/m3 | 2004/37/EC | | |
| | Further information: Carcinogens or mutagens | | | | | |
| | | AGW (Inhalable fraction) | 4 mg/m3 (Silica) | DE TRGS 900 | | |
| | | | s compliance with the OEL a of harming the unborn child | nd biological | | |
| maleic anhydride | 108-31-6 | AGW (Vapour and aerosols) | 0,02 ppm 0,081 mg/m3 | DE TRGS 900 | | |
| | Peak-limit category: 1; =2.5=(I) | | | | | |
| Further information: In well-f tablished, that never can be in combination with an exceed OEL and biological tolerance. | | t never can be excee n with an exceeding ogical tolerance valu | eded. This substance will be value., When there is compl | indicated by = = iance with the g the unborn | | |
| | | Mow | 0,05 ppm 0,2 mg/m3 | DE DFG MAK | | |
| | | | nsitization of the airways and ikely when the MAK value or | | | |
| | | MAK | 0,02 ppm 0,081 mg/m3 | DE DFG MAK | | |
| | | <u> </u> | nsitization of the airways and ikely when the MAK value or | | | |

Biological occupational exposure limits

| Substance name CAS-No. Control parameters Sampling time Basis |
|---|
|---|

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| styrene | 100-42-5 | mandelic acid + phenylglyoxylic acid: 600 mg/g creatinine (Urine) | In case of long- term exposure: after more than one shift, Immedi- ately after expo- sure or after work- ing hours | TRGS 903 |
|---------|----------|--|--|---------------|
| | | mandelic acid plus phenylglyoxylic acid: 600 mg/g creatinine (Urine) | end of shift, for long-term exposures after several previous shifts, Immediately after exposition or after working hours | DE DFG BAT |

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

| Substance name | End Use | Routes of expo- sure | Potential health effects | Value |
|------------------|-----------|-------------------------|---|---------------------|
| styrene | Workers | Dermal | Long-term systemic effects, Chronic effects | 406 mg/kg bw/day |
| | Workers | Inhalation | Long-term systemic effects, Chronic effects | 85 mg/m3 |
| | Workers | Inhalation | Acute systemic effects, Chronic effects | 289 mg/m3 |
| | Workers | Inhalation | Acute local effects, Short-term exposure | 306 mg/m3 |
| | Consumers | Oral | Long-term systemic effects, Chronic effects | 2,1 mg/kg bw/day |
| | Consumers | Dermal | Long-term systemic effects, Chronic effects | 343 mg/kg bw/day |
| | Consumers | Inhalation | Long-term systemic effects, Chronic effects | 10,2 mg/m3 |
| | Consumers | Inhalation | Acute systemic effects, Short-term exposure | 174,25 mg/m3 |
| | Consumers | Inhalation | Acute local effects, Short-term exposure | 182,75 mg/m3 |
| maleic anhydride | Workers | Inhalation | Long-term systemic effects | 0,081 mg/m3 |
| | Workers | Inhalation | Acute systemic effects | 0,2 mg/m3 |

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

| Substance name | Environmental Compartment | Value |
|----------------|---------------------------|----------------------------------|
| styrene | Fresh water | 0,028 mg/l |
| | Sea water | 0,014 mg/l |
| | Fresh water sediment | 0,614 mg/kg dry weight (d.w.) |

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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| | Sea sediment | 0,307 mg/kg dry weight (d.w.) |
|------------------|------------------------------|----------------------------------|
| | Soil | 0,2 mg/kg dry weight (d.w.) |
| | Sewage treatment plant (STP) | 5 mg/l |
| maleic anhydride | Fresh water | 0,038 mg/l |
| | Sea water | 0,004 mg/l |
| | Fresh water sediment | 0,296 mg/kg dry weight (d.w.) |
| | Sea sediment | 0,03 mg/kg dry weight (d.w.) |
| | Soil | 0,037 mg/kg dry weight (d.w.) |
| | Sewage treatment plant (STP) | 44,6 mg/l |

8.2 Exposure controls

Personal protective equipment

Eye/face protection : Safety glasses with side-shields conforming to EN166

Hand protection

Directive : Equipment should conform to EN 374

Material : PVA
Break through time : > 480 min
Glove thickness : 0,2 - 0,3 mm

Material : Fluorinated rubber

Break through time : > 480 minGlove thickness : >= 0,4 mm

Remarks : Gloves should be discarded and replaced if there is any indi-

cation of degradation or chemical breakthrough. The data about break through time/strength of material are standard values! The exact break through time/strength of material has to be obtained from the producer of the protective glove. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Preventive skin protection Butyl gloves are not suitable. Nitrile gloves are not suitable.

Avoid natural rubber gloves.

Skin and body protection : Please wear suitable protective clothing, e.g. made of cotton

or heat-resistant synthetic fibres.

Long sleeved clothing

Respiratory protection : Apply technical measures to comply with the occupational

exposure limits.

If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment

should be used.

Dry sanding, flame cutting and/or welding of the cured materi-

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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al will give rise to dust and/or hazardous fumes.

Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release

(dust).

Filter type : Combined particulates and organic vapor type (A-P)

Protective measures : Ensure that eye flushing systems and safety showers are

located close to the working place. Avoid contact with the skin and the eyes. Use only with adequate ventilation.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : paste

Color : black

Odor : characteristic

Melting point/range : -30 °C

Literary value styrene

Boiling point/boiling range : 145 °C (1.013 hPa)

Literary value styrene

Upper explosion limit / Upper

flammability limit

6,1 %(V)

Literary value styrene

Lower explosion limit / Lower :

flammability limit

1,1 %(V)

Literary value styrene

Flash point : $31 \, ^{\circ}\text{C}(1.013 \, \text{hPa})$

Literary value styrene

Autoignition temperature : 490 °C (1.013 hPa)

Literary value styrene

Decomposition temperature : No data available

pH : Not applicable substance/mixture is non-soluble (in water)

Viscosity

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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Viscosity, dynamic : not determined

Viscosity, kinematic : not determined

Solubility(ies)

Water solubility : 0,32 g/l (25 °C)

Literary value styrene

Partition coefficient: n-

octanol/water

log Pow: 2,96 (25 °C)

Literary value styrene

Vapor pressure : 6,67 hPa (20 °C)

Literary value styrene

Density : ca. 1,2 g/cm3 (20 °C)

Relative vapor density : No data available

Particle characteristics

Assessment : This substance/ mixture contains nanoforms

Particle size : Further particle properties for nanomaterials see section 3

9.2 Other information

Explosives : Not explosive

In use, may form flammable/explosive vapour-air mixture.

Flammability (liquids) : Flammable

Self-ignition : not auto-flammable

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if used as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : Avoid radical-forming starting agents, peroxides and reactive

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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metals.

Polymerization can occur. Polymerization is a highly exothermic reaction and may generate sufficient heat to cause ther-

mal decomposition and/or rupture containers.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

Strong sunlight for prolonged periods.

10.5 Incompatible materials

Materials to avoid : Strong acids and oxidizing agents

polymerization initiators

Copper alloys

Brass

10.6 Hazardous decomposition products

Build-up of dangerous/toxic fumes possible in cases of fire/high temperature.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Not classified due to lack of data.

Product:

Acute inhalation toxicity : Acute toxicity estimate: > 20 mg/l

Exposure time: 4 h
Test atmosphere: vapor
Method: Calculation method

Components:

styrene:

Acute oral toxicity : LD50 Oral (Rat): 5.000 mg/kg

Acute inhalation toxicity : LC50 (Rat): 11,8 mg/l

Exposure time: 4 h
Test atmosphere: vapor

Acute dermal toxicity : LD50 Dermal (Rat): > 2.000 mg/kg

Method: OECD Test Guideline 402

maleic anhydride:

Acute oral toxicity : LD50 Oral (Rat): 1.090 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 4,35 mg/l

Exposure time: 1 h

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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Test atmosphere: dust/mist

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 Dermal (Rabbit): 2.620 mg/kg

Talc:

Acute oral toxicity : LD50 Oral (Rat): 5.000 mg/kg

Method: OECD Test Guideline 423

Acute inhalation toxicity : Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 Dermal (Rat): > 2.000 mg/kg

Method: OECD Test Guideline 402

Copper chromite black spinel:

Acute oral toxicity : LD50 Oral (Rat): > 5.000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5,07 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Silicon dioxide:

Acute oral toxicity : LD50 Oral (Rat): > 5.000 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 5,01 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 436

Acute dermal toxicity : LD50 Dermal (Rabbit): > 2.000 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Components:

styrene:

Species : Rabbit Result : irritating

Serious eye damage/eye irritation

Causes serious eye irritation.

Components:

styrene:

Species : Rabbit

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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Result : irritating

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

Not classified due to lack of data.

Components:

styrene:

Species : Guinea pig

Result : Does not cause skin sensitization.

maleic anhydride:

Result : The product is a skin sensitizer, sub-category 1A.

Germ cell mutagenicity

Not classified due to lack of data.

Carcinogenicity

Not classified due to lack of data.

Reproductive toxicity

Suspected of damaging the unborn child.

Components:

styrene:

Reproductive toxicity - As-

sessment

Suspected of damaging the unborn child., Some evidence of

adverse effects on development, based on animal experi-

ments.

STOT-single exposure

Not classified due to lack of data.

Components:

styrene:

Assessment : May cause respiratory irritation.

STOT-repeated exposure

Causes damage to organs (hearing organs) through prolonged or repeated exposure if inhaled.

Components:

styrene:

Routes of exposure : Inhalation Target Organs : hearing organs

Assessment : Causes damage to organs through prolonged or repeated

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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exposure.

maleic anhydride:

Routes of exposure : Inhalation

Target Organs : Respiratory system

Assessment : Causes damage to organs through prolonged or repeated

exposure.

Aspiration toxicity

Not classified due to lack of data.

Components:

styrene:

May be fatal if swallowed and enters airways.

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

SECTION 12: Ecological information

12.1 Toxicity

Components:

styrene:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 4,02 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 4,7 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Selenastrum capricornutum (green algae)): 4,9 mg/l

Exposure time: 72 h

EC10 (Selenastrum capricornutum (green algae)): 0,28 mg/l

Exposure time: 96 h

Toxicity to microorganisms : EC50 (Natural microorganism): ca. 500 mg/l

Method: OECD Test Guideline 209

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 1,01 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

Ecotoxicology Assessment

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

maleic anhydride:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 75 mg/l

Exposure time: 96 h Method: EPA-660/3-75-00

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 37,9 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): 65,78

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 10 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

Ecotoxicology Assessment

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

Silicon dioxide:

Toxicity to fish : LC0 (Brachydanio rerio (zebrafish)): > 10.000 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

LC50 (Daphnia magna (Water flea)): > 1.000 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

12.2 Persistence and degradability

Components:

styrene:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 70,9 % Exposure time: 28 d

maleic anhydride:

Biodegradability : Result: Readily biodegradable.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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Biodegradation: > 90 % Exposure time: 225 d

Method: OECD Test Guideline 301B

12.3 Bioaccumulative potential

Components:

styrene:

Partition coefficient: n-

: log Pow: 2,96 (25 °C)

octanol/water

maleic anhydride:

Partition coefficient: n-

octanol/water

log Pow: -2,61 (20 °C)

Talc:

Partition coefficient: n-

log Pow: -9,4 (25 °C)

octanol/water

pH: 7

Copper chromite black spinel:

Partition coefficient: n-

octanol/water

Remarks: not determined

Silicon dioxide:

Partition coefficient: n-

octanol/water

Remarks: Not applicable

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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12.7 Other adverse effects

Product:

Additional ecological infor-

mation

: No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Do not dispose of with domestic refuse.

Do not empty into drains, dispose of this material and its con-

tainer at hazardous or special waste collection point. Dispose of in accordance with local regulations.

Dispose of wastes in an approved waste disposal facility.

Send to a licensed waste management company.

Contaminated packaging : Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

Store containers and offer for recycling of material when in

accordance with the local regulations.

Packaging that is not properly emptied must be disposed of as

the unused product.

Dispose of in accordance with local regulations.

Waste Code : The following Waste Codes are only suggestions:

07 02 08, other still bottoms and reaction residues

SECTION 14: Transport information

14.1 UN number or ID number

ADN : UN 1866
ADR : UN 1866
RID : UN 1866
IMDG : UN 1866
IATA : UN 1866

14.2 UN proper shipping name

ADN : RESIN SOLUTION
ADR : RESIN SOLUTION
RID : RESIN SOLUTION
IMDG : RESIN SOLUTION
IATA : Resin solution

14.3 Transport hazard class(es)

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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Class Subsidiary risks

ADN : 3
ADR : 3
RID : 3
IMDG : 3
IATA : 3

14.4 Packing group

ADN

Packing group : III
Classification Code : F1
Hazard Identification Number : 30
Labels : 3

ADR

Packing group : III
Classification Code : F1
Hazard Identification Number : 30
Labels : 3
Tunnel restriction code : (D/E)

RID

Packing group : III
Classification Code : F1
Hazard Identification Number : 30
Labels : 3

IMDG

Packing group : III
Labels : 3
EmS Code : F-E, S-E

IATA (Cargo)

Packing instruction (cargo : 366

aircraft)

Packing instruction (LQ) : Y344
Packing group : III

Labels : Flammable Liquids

IATA (Passenger)

Packing instruction (passen: 355

ger aircraft)

Packing instruction (LQ) : Y344
Packing group : III

Labels : Flammable Liquids

14.5 Environmental hazards

ADN

Environmentally hazardous : no

ADR

Environmentally hazardous : no

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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Environmentally hazardous no

IMDG

Marine pollutant no

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

Conditions of restriction for the following entries should be considered: Number on list 75, 3

If you intend to use this product as tattoo ink, please contact your vendor.

Copper chromite black spinel (Number on list 72, 28)

benzene (Number on list 72, 5, 29,

28)

REACH - Candidate List of Substances of Very High

Concern for Authorization (Article 59).

Not applicable

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer

Not applicable

Regulation (EU) 2019/1021 on persistent organic pollu-

tants (recast)

Not applicable

REACH - List of substances subject to authorisation

(Annex XIV)

Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

P5c FLAMMABLE LIQUIDS

Water hazard class (Germa-WGK 2 obviously hazardous to water

Classification according to AwSV, Annex 1 (5.2) ny)

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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Volatile organic compounds : Directive 2004/42/EC

Volatile organic compounds (VOC) content: < 250 g/l VOC content for the product in a ready to use condition.

Other regulations:

The product is subject to the supply restrictions of the Ordinance on the Prohibition of Chemicals.

Take note of Law on the protection of mothers at work, in education and in studies (Maternity Protection Act - MuSchG).

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

15.2 Chemical Safety Assessment

A chemical safety assessment according to (EC) regulation 1907/2006 (REACH) has not been carried out for this product.

SECTION 16: Other information

Full text of H-Statements

H226 : Flammable liquid and vapor.

H302 : Harmful if swallowed.

H304 : May be fatal if swallowed and enters airways. H314 : Causes severe skin burns and eye damage.

H315 : Causes skin irritation.

H317 : May cause an allergic skin reaction.
H318 : Causes serious eye damage.
H319 : Causes serious eye irritation.

H332 : Harmful if inhaled.

H334 : May cause allergy or asthma symptoms or breathing difficul-

ties if inhaled.

H335 : May cause respiratory irritation.

H361d : Suspected of damaging the unborn child.

H372 : Causes damage to organs through prolonged or repeated

exposure if inhaled.

H372 : Causes damage to organs through prolonged or repeated

exposure.

H412 : Harmful to aquatic life with long lasting effects.

EUH071 : Corrosive to the respiratory tract.

Full text of other abbreviations

Acute Tox. : Acute toxicity

Aquatic Chronic : Long-term (chronic) aquatic hazard

Asp. Tox. : Aspiration hazard
Eye Dam. : Serious eye damage
Eye Irrit. : Eye irritation

Flam. Liq. : Flammable liquids
Repr. : Reproductive toxicity

concentration

DE TRGS 900 / AGW

DE TRGS 910 / Tolerable

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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|------|----------------------------|---------------------------|--|
| | Resp. Sens. | : Respiratory sei | nsitization |
| | Skin Corr. | : Skin corrosion | isitization |
| | Skin Irrit. | : Skin corrosion | |
| | Skin Sens. | : Skin sensitizati | on |
| | STOT RE | | organ toxicity - repeated exposure |
| | STOT SE | | organ toxicity - repeated exposure |
| | 2004/37/EC | | ve 2004/37/EC on the protection of workers |
| | 2004/31/20 | | related to exposure to carcinogens or mutagens |
| | | at work | elated to exposure to carcinogens of mutagens |
| | 2017/164/EU | | nission Directive 2017/164/EU establishing a |
| | 2017/104/20 | | dicative occupational exposure limit values |
| | DE DEG BAT | | BAT Annex XIII |
| | DE DFG MAK | | K BAT Annex IIa |
| | DE TRGS 527 | | SS 527 - Activities with nanomaterials |
| | DE TRGS 900 | | SS 900 - Occupational exposure limit values. |
| | DE TRGS 900 DE TRGS 910 | | SS 910 - Substance-specific acceptable and |
| | DE 11100 310 | | entrations and equivalence values for carcino- |
| | | genic hazardou | |
| | TRGS 903 | : c - Biological lir | |
| | 2004/37/EC / TWA | : Long term expo | |
| | 2017/164/EU / TWA | : Limit Value - ei | |
| | DE DFG MAK / Mow | : Momentary val | |
| | DE DFG MAK / MAK | : MAK value | uc |
| | DE TRGS 527 / BM | : Assessment so | عاد |
| | DE TROS JET / DIVI | . ^335331116111 30 | paic |

Time Weighted Average

Tolerable concentration

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways: ADR - Agreement concerning the International Carriage of Dangerous Goods by Road: AIIC - Australian Inventory of Industrial Chemicals: ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA -European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals: OECD - Organization for Economic Co-operation and Development: OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture: Classification procedure: Flam. Liq. 3 H226 Based on product data or assessment Skin Irrit. 2 H315 Calculation method Eye Irrit. 2 H319 Calculation method Skin Sens. 1 H317 Calculation method Repr. 2 H361d Calculation method STOT RE 1 H372 Calculation method

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

DE / EN

according to Regulation (EC) No. 1907/2006

Carsystem Metallic

Version Revision Date: Date of last issue: 30.05.2022 2.1 DE / EN 27.11.2023 Date of first issue: 30.05.2022

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : Carsystem Metallic

Product code : 127.911

This substance/ mixture contains nanoforms

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Sub- : Body filler/stopper

stance/Mixture

Recommended restrictions

on use

: Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet

Company : JASA AG

Müslistrasse 43 8957 Spreitenbach

Schweiz

info@jasa-ag.ch, www.jasa-ag.ch

Telephone : +41 (0)44 431 60 70 Telefax : +41 (0)44 432 63 17

Responsible Department : Productmanagement, Tel: +41 (0)44 431 60 70, sds@jasa-ag.ch

1.4 Emergency telephone

Telephone : Tox Info Suisse (STIZ), Tel: 145

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

BPO-Härter rot

Version Revision Date: Date of last issue: 27.02.2024 2.4 DE / EN 25.03.2024 Date of first issue: 11.07.2022

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : BPO-Härter rot

Product code : 132.413

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Sub- : Curing chemical

stance/Mixture

Recommended restrictions :

on use

: Industrial use, professional use, public use

1.3 Details of the supplier of the safety data sheet

Company : JASA AG

Müslistrasse 43 8957 Spreitenbach

Schweiz

info@jasa-ag.ch, www.jasa-ag.ch

Telephone : +41 (0)44 431 60 70 Telefax : +41 (0)44 432 63 17

Responsible Department : Productmanagement, Tel: +41 (0)44 431 60 70, sds@jasa-ag.ch

1.4 Emergency telephone

Telephone : Tox Info Suisse (STIZ), Tel: 145

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

BPO-Härter rot

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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Organic peroxides, Type E H242: Heating may cause a fire.

Eye irritation, Category 2 H319: Causes serious eye irritation.

Skin sensitization, Category 1 H317: May cause an allergic skin reaction.

Short-term (acute) aquatic hazard, Cate-

gory 1

H400: Very toxic to aquatic life.

Long-term (chronic) aquatic hazard, Cat-

egory 1

H410: Very toxic to aquatic life with long lasting

effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms







Signal Word : Warning

Hazard Statements : H242 Heating may cause a fire.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements :

P101 If medical advice is needed, have product con-

tainer or label at hand.

P102 Keep out of reach of children.

Prevention:

P210 Keep away from heat, hot surfaces, sparks, open

flames and other ignition sources. No smoking.

P220 Keep/Store away from clothing/ strong acids, ba-

ses, heavy metal salts and other reducing sub-

stances /combustible materials.

P234 Keep only in original packaging. P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye

protection/ face protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and

water.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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P305 + P351 + P338 IF IN EYES: Rinse cautiously with wa-

ter for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P314 Get medical advice/ attention if you feel unwell.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

P410 Protect from sunlight.

Disposal:

P501 Dispose of contents/ container to an approved

facility in accordance with local, regional, national

and international regulations.

Hazardous ingredients which must be listed on the label:

dibenzoyl peroxide

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Mixture

contains

Organic Peroxide

Components

| Chemical name | CAS-No. EC-No. Index-No. Registration number | Classification | Concentration (% w/w) |
|--------------------|--|---|--------------------------|
| dibenzoyl peroxide | 94-36-0 202-327-6 617-008-00-0 01-2119511472-50 | Org. Perox. B; H241 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 ——— M-Factor (Acute | >= 45 - <= 52 |

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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| | | aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 10 | |
|------------|---|---|-------------|
| ethanediol | 107-21-1 203-473-3 603-027-00-1 01-2119456816-28 | Acute Tox. 4; H302 STOT RE 2; H373 (Kidney) | >= 1 - < 10 |

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice : In the case of accident or if you feel unwell, seek medical ad-

vice immediately.

Move out of dangerous area.

Take off contaminated clothing and shoes immediately. Show this material safety data sheet to the doctor in attend-

ance.

First aider needs to protect himself.

If inhaled : Move to fresh air.

Get medical attention.

In case of skin contact : Wash off immediately with soap and plenty of water.

Call a physician if irritation persists.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,

for at least 15 minutes.

Keep eye wide open while rinsing.

Remove contact lenses. Consult a physician.

If swallowed : Rinse mouth with water.

Do NOT induce vomiting. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Risks : May cause an allergic skin reaction.

Causes serious eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Carbon dioxide (CO2)

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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> Dry powder Water spray jet Alcohol-resistant foam

Unsuitable extinguishing

media

High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire

fighting

Hazardous decomposition products formed under fire condi-

tions.

5.3 Advice for firefighters

Special protective equipment :

for fire-fighters

Wear self-contained breathing apparatus and protective suit.

Further information : Use water spray to cool unopened containers.

Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Wear personal protective equipment.

Evacuate personnel to safe areas.

Ensure adequate ventilation, especially in confined areas.

Remove all sources of ignition.

Do not smoke.

Avoid contact with skin, eyes and clothing.

In the case of vapor formation use a respirator with an ap-

proved filter.

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.

Local authorities should be advised if significant spillages

cannot be contained.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

Do not flush with water.

6.4 Reference to other sections

For personal protection see section 8., For disposal considerations see section 13.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

BPO-Härter rot

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

Technical measures Ensure that eyewash stations and safety showers are close to

the workstation location.

Use only with adequate ventilation. Advice on safe handling

Provide sufficient air exchange and/or exhaust in work rooms.

Wear personal protective equipment.

Keep away from heat and sources of ignition. Handle and open container with care. Keep container tightly closed and dry.

Never return unused material to storage receptacle.

Risk of decomposition.

Prevent contamination with readily oxidizable materials and

polymerization accelerators. Avoid inhalation of vapor or mist.

In case of insufficient ventilation, wear suitable respiratory

equipment.

Avoid release to the environment.

Advice on protection against

fire and explosion

Normal measures for preventive fire protection. Keep away from open flames, hot surfaces and sources of ignition. Keep away from direct sunlight. Avoid shock and friction. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Store in original container. Avoid letting the product become dry. Keep containers tightly closed in a cool, well-ventilated place. Store between 41 and 77 °F in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

Advice on common storage

Keep away from food, drink and animal feedingstuffs.

Keep away from reducing agents. Incompatible with acids and bases.

Heavy metal compounds

Storage class (TRGS 510) 5.2

Recommended storage tem- : 5 - 25 °C

perature

7.3 Specific end use(s)

Specific use(s) No data available

> The rules which cover amongst other things the requirement for ventilation, protective clothing, personal protective equipment etc. can be obtained from the National Occupational

Health and Safety Board.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

| Components | CAS-No. | Value type (Form of exposure) | Control parameters | Basis |
|--------------------|---|-------------------------------|--------------------|----------------|
| dibenzoyl peroxide | 94-36-0 | AGW (Inhalable fraction) | 5 mg/m3 | DE TRGS 900 |
| | Peak-limit category: 1;(I) | | | |
| | | MAK (measured | 1 mg/m3 | DE DFG MAK |
| | | as the alveolate | | |
| | | fraction) | | |
| | Further information: Damage to the embryo or foetus is unlikely when the MAK value or the BAT value is observed | | | when the |
| | | | | T |
| | | MAK (inhalable fraction) | 4 mg/m3 | DE DFG MAK |
| | Further information: Damage to the embryo or foetus is unlikely when the | | | when the |
| | MAK value or the BAT value is observed | | | |
| ethanediol | 107-21-1 | STEL | 40 ppm | 2000/39/EC |
| | | | 104 mg/m3 | |
| | Further information: Identifies the possibility of significant uptake through the skin, Indicative | | | |
| | | TWA | 20 ppm | 2000/39/EC |
| | | | 52 mg/m3 | |
| | Further information: Identifies the possibility of significant uptake through | | e through the | |
| | skin, Indicative | | | |
| | | AGW (Vapour | 10 ppm | DE TRGS |
| | | and aerosols) | 26 mg/m3 | 900 |
| | Peak-limit category: 2;(I) Further information: Skin absorption, When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child | | | |
| | | | | |
| | | | | |
| | | MAK | 10 ppm | DE DFG MAK |
| | | | 26 mg/m3 | |
| | Further information: Danger of absorption through the skin, Damage to the embryo or foetus is unlikely when the MAK value or the BAT value is ob- | | | |
| | | | | |
| | served | | | |

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

| | • • | - | • • | |
|--------------------|-----------|-----------------|------------------------------|----------------------|
| Substance name | End Use | Routes of expo- | Potential health ef- | Value |
| | | sure | fects | |
| dibenzoyl peroxide | Consumers | Oral | Long-term systemic effects | 2 mg/kg bw/day |
| | Workers | Dermal | Long-term systemic effects | 13,3 mg/kg bw/day |
| | Workers | Inhalation | Long-term systemic effects | 39 mg/m3 |
| ethanediol | Workers | Inhalation | Long-term local ef- fects | 35 mg/m3 |
| | Workers | Dermal | Long-term systemic effects | 106 mg/kg |

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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| Consumers | Inhalation | Long-term local effects | 7 mg/m3 |
|-----------|------------|----------------------------|----------|
| Consumers | Dermal | Long-term systemic effects | 53 mg/kg |

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

| Substance name | Environmental Compartment | Environmental Compartment Value | |
|--------------------|------------------------------|------------------------------------|--|
| dibenzoyl peroxide | Fresh water | 0,00002 mg/l | |
| | Intermittent use/release | 0,000602 mg/l | |
| | Sea water | 0,000002 mg/l | |
| | Fresh water sediment | 0,0127 mg/kg dry weight (d.w.) | |
| | Sea sediment | 0,00127 mg/kg dry weight (d.w.) | |
| | Soil | 0,0025 mg/kg dry weight (d.w.) | |
| | Sewage treatment plant (STP) | 0,35 mg/l | |
| ethanediol | Fresh water | 10 mg/l | |
| | Sea water | 1 mg/l | |
| | Intermittent use/release | 10 mg/l | |
| | Sewage treatment plant (STP) | 199,5 mg/l | |
| | Fresh water sediment | 20,9 mg/kg | |
| | Soil | 1,53 mg/kg | |

8.2 Exposure controls

Personal protective equipment

Eye/face protection : Safety glasses with side-shields conforming to EN166

Hand protection

Material : Neoprene gloves

Material : Nitrile rubber
Break through time : > 30 min
Glove thickness : >= 0,14 mm
Directive : DIN EN 374
Protective index : Class 2

Remarks : Gloves should be discarded and replaced if there is any indi-

cation of degradation or chemical breakthrough. The data about break through time/strength of material are standard values! The exact break through time/strength of material has to be obtained from the producer of the protective glove. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different

from one producer to the other.

Skin and body protection : Please wear suitable protective clothing, e.g. made of cotton

or heat-resistant synthetic fibres.

Long sleeved clothing

Respiratory protection : Apply technical measures to comply with the occupational

exposure limits.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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When workers are facing concentrations above the exposure

limit they must use appropriate certified respirators.

In case of inadequate ventilation wear respiratory protection.

Combined particulates and organic vapor type (A-P) Filter type

Protective measures When using do not eat, drink or smoke.

Ensure that eye flushing systems and safety showers are

located close to the working place. Avoid contact with the skin and the eyes. Use only with adequate ventilation.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state paste

Color red

Odor characteristic

Odor Threshold not determined

Melting point/range 0 °C

Boiling point/boiling range Not applicable

Upper explosion limit / Upper

flammability limit

Not applicable

Lower explosion limit / Lower

flammability limit

Not applicable

Not applicable, Decomposition Flash point

Autoignition temperature Not applicable

Self-Accelerating decomposi- : 50 °C

tion temperature (SADT)

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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pH : 4 - 5 (20 °C)

Viscosity

Viscosity, dynamic : not determined

Viscosity, kinematic : not determined

Solubility(ies)

Water solubility : insoluble

Partition coefficient: n-

octanol/water

: No data available

Vapor pressure : 23 hPa

(for a component of this mixture)

Density : 1,15 - 1,25 g/cm3 (20 °C)

Relative vapor density : not determined

9.2 Other information

Oxidizing properties : Organic peroxide

Sustains combustion

Organic peroxides : Peroxide content: 50 %

The substance or mixture is an organic peroxide classified as

type E.

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if used as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : Risk of decomposition.

Reacts violently in contact with acids, amines, driers, polymer-

ization accelerators and easily oxidized materials.

10.4 Conditions to avoid

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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Conditions to avoid : Do not expose to temperatures above: > 25 °C

Extremes of temperature and direct sunlight. Keep away from heat and sources of ignition.

Contact with incompatible substances can cause decomposi-

tion at or below SADT.

10.5 Incompatible materials

Materials to avoid : Accelerators, strong acids and bases, heavy metals and

heavy metal salts, reducing agents

10.6 Hazardous decomposition products

Irritant, caustic, flammable, noxious/toxic gases and vapours can develop in the case of fire and

decomposition

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Not classified due to lack of data.

Product:

Acute oral toxicity : Acute toxicity estimate: > 2.000 mg/kg

Method: Calculation method

Components:

dibenzoyl peroxide:

Acute oral toxicity : LD50 Oral (Rat): > 2.000 mg/kg

Acute inhalation toxicity : LC0 (Rat): > 24,3 mg/l

Exposure time: 4 h

ethanediol:

Acute inhalation toxicity : LC50 (Rat): > 2,5 mg/l

Exposure time: 6 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 Dermal (Mouse): > 3.500 mg/kg

Skin corrosion/irritation

Not classified due to lack of data.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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Respiratory sensitization

Not classified due to lack of data.

Germ cell mutagenicity

Not classified due to lack of data.

Carcinogenicity

Not classified due to lack of data.

Reproductive toxicity

Not classified due to lack of data.

STOT-single exposure

Not classified due to lack of data.

STOT-repeated exposure

Not classified due to lack of data.

Components:

ethanediol:

Routes of exposure : Oral Target Organs : Kidney

Assessment : The substance or mixture is classified as specific target organ

toxicant, repeated exposure, category 2.

Aspiration toxicity

Not classified due to lack of data.

Components:

ethanediol:

No aspiration toxicity classification

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

SECTION 12: Ecological information

12.1 Toxicity

Components:

dibenzoyl peroxide:

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0,0602 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

NOEC (Oncorhynchus mykiss (rainbow trout)): 0,0316 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0,11 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

NOEC (Daphnia magna (Water flea)): 0,076 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (microalgae)): 0,0711

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 0,02

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

M-Factor (Acute aquatic tox-

icity)

: 10

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

EC10: 0,001 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

M-Factor (Chronic aquatic

toxicity)

10

ethanediol:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 72.860 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

NOEC (algae): > 100 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to fish (Chronic tox-

icity)

NOEC: 15.380 mg/l

Exposure time: 7 d

Species: Pimephales promelas (fathead minnow)

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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Toxicity to daphnia and other : NOEC: 8.590 mg/l aquatic invertebrates (Chron-

Exposure time: 7 d ic toxicity)

Species: Ceriodaphnia dubia (water flea)

12.2 Persistence and degradability

Components:

dibenzoyl peroxide:

Biodegradability Result: Readily biodegradable.

Biodegradation: 71 % Exposure time: 28 d

Method: OECD Test Guideline 301D

ethanediol:

Biodegradability Result: Readily biodegradable.

Biodegradation: 90 - 100 %

Exposure time: 10 d

Method: OECD Test Guideline 301A

12.3 Bioaccumulative potential

Components:

dibenzoyl peroxide:

Partition coefficient: n-

octanol/water

log Pow: 3,2 (20 °C)

ethanediol:

Partition coefficient: n-

octanol/water

log Pow: -1,36 (25 °C)

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment This substance/mixture contains no components considered

> to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment The substance/mixture does not contain components consid-

> ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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levels of 0.1% or higher.

12.7 Other adverse effects

Product:

Additional ecological infor-

mation

: No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Do not mix waste streams during collection.

Do not dispose of with domestic refuse.

Do not empty into drains, dispose of this material and its con-

tainer at hazardous or special waste collection point. Dispose of in accordance with local regulations.

Contaminated packaging : Packaging that is not properly emptied must be disposed of as

the unused product.

Dispose of in accordance with local regulations.

Waste Code : The following Waste Codes are only suggestions:

16 05 06, laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chem-

icals

16 09 03, peroxides, for example hydrogen peroxide

SECTION 14: Transport information

14.1 UN number or ID number

ADN : UN 3108
ADR : UN 3108
RID : UN 3108
IMDG : UN 3108
IATA : UN 3108

14.2 UN proper shipping name

ADN : ORGANIC PEROXIDE TYPE E, SOLID

(dibenzoyl peroxide)

ADR : ORGANIC PEROXIDE TYPE E, SOLID

(dibenzoyl peroxide)

RID : ORGANIC PEROXIDE TYPE E, SOLID

(dibenzoyl peroxide)

IMDG : ORGANIC PEROXIDE TYPE E, SOLID

(dibenzoyl peroxide)

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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IATA : Organic peroxide type E, solid

(dibenzoyl peroxide)

14.3 Transport hazard class(es)

Class Subsidiary risks

ADN : 5.2
ADR : 5.2
RID : 5.2
IMDG : 5.2

IATA : 5.2 HEAT

14.4 Packing group

ADN

Packing group : Not assigned by regulation

Classification Code : P1 Labels : 5.2

ADR

Packing group : Not assigned by regulation

Classification Code : P1 Labels : 5.2 Tunnel restriction code : (D)

RID

Packing group : Not assigned by regulation

Classification Code : P1 Hazard Identification Number : 539 Labels : 5.2

IMDG

Packing group : Not assigned by regulation

Labels : 5.2 EmS Code : F-J, S-R

IATA (Cargo)

Packing instruction (cargo : 570

aircraft)

Packing group : Not assigned by regulation

Labels : Organic Peroxides, Keep Away From Heat

IATA (Passenger)

Packing instruction (passen- : 570

ger aircraft)

Packing group : Not assigned by regulation

Labels : Organic Peroxides, Keep Away From Heat

14.5 Environmental hazards

ADN

Environmentally hazardous : no

ADR

Environmentally hazardous : no

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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Environmentally hazardous no

IMDG

Marine pollutant yes

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

Conditions of restriction for the following entries should be considered: Number on list 75

If you intend to use this product as tattoo ink, please contact your ven-

dor.

REACH - Candidate List of Substances of Very High

Concern for Authorization (Article 59).

Not applicable

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer

Not applicable

Regulation (EU) 2019/1021 on persistent organic pollu-

tants (recast)

Not applicable

REACH - List of substances subject to authorisation

(Annex XIV)

Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving

dangerous substances.

SELF-REACTIVE SUBSTANCES P₆b AND MIXTURES and ORGANIC

PEROXIDES

E1 **ENVIRONMENTAL HAZARDS**

Water hazard class (Germa- : WGK 2 obviously hazardous to water

ny) Classification according to AwSV, Annex 1 (5.2)

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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Other regulations:

BG-Merkblatt M001 beachten (German regulatory requirements) BGV B4 organische Peroxide. (German regulatory requirements)

Gefahrengruppe nach § 3 BGV B4: II (German regulatory requirements)

§ 5Abs. 4b : Derogation according to the Ordinance on the Prohibition of Chemicals (ChemVerbotsV)

The product is subject to the supply restrictions of the Ordinance on the Prohibition of Chemicals

Take note of Law on the protection of mothers at work, in education and in studies (Maternity Protection Act - MuSchG).

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

15.2 Chemical Safety Assessment

A chemical safety assessment according to (EC) regulation 1907/2006 (REACH) has not been carried out for this product.

SECTION 16: Other information

Full text of H-Statements

H241 : Heating may cause a fire or explosion.

H302 : Harmful if swallowed.

H317 : May cause an allergic skin reaction.
H319 : Causes serious eye irritation.

H373 : May cause damage to organs through prolonged or repeated

exposure if swallowed.

H400 : Very toxic to aquatic life.

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

Full text of other abbreviations

Acute Tox. : Acute toxicity

Aquatic Acute : Short-term (acute) aquatic hazard Aquatic Chronic : Long-term (chronic) aquatic hazard

Eye Irrit. : Eye irritation
Org. Perox. : Organic peroxides
Skin Sens. : Skin sensitization

STOT RE : Specific target organ toxicity - repeated exposure

2000/39/EC : Europe. Commission Directive 2000/39/EC establishing a first

list of indicative occupational exposure limit values

DE DFG MAK : Germany. MAK BAT Annex IIa

DE TRGS 900 : Germany. TRGS 900 - Occupational exposure limit values.

2000/39/EC / TWA : Limit Value - eight hours 2000/39/EC / STEL : Short term exposure limit

DE DFG MAK / MAK : MAK value

DE TRGS 900 / AGW : Time Weighted Average

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA -European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI -Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture: Classification procedure:

| | | • • • • • • • • • • • • • • • • • • • |
|-------------------|------|---------------------------------------|
| Org. Perox. E | H242 | Based on product data or assessment |
| Eye Irrit. 2 | H319 | Calculation method |
| Skin Sens. 1 | H317 | Calculation method |
| Aquatic Acute 1 | H400 | Calculation method |
| Aquatic Chronic 1 | H410 | Calculation method |

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

DE / EN

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