# SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

## brake fluid FORCE DOT-5.1

| | | | |
|---|---|---|---|
| Creation date | 25. January 2019 | Revision no. | 1 |
| Revision date | 06. March 2017 | Version | 1 |

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

**1.1. Product identifier** — brake fluid FORCE DOT-5.1

Substance / mixture: mixture

Number: 895894 + 8958941

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

mixture's intended use: brake fluid

Mixture uses advised against: The product should not be used in ways other then those referred in Section 1.

**1.3. Details of the supplier of the safety data sheet**

**Distributor**

| | |
|---|---|
| Name or trade name | KCK Cyklosport-Mode s.r.o. |
| Address | Bartošova 348, Otrokovice - Kvítkovice, 765 02<br>Czech Republic |
| Identification number (CRN) | 18559751 |
| VAT Reg No | CZ 185 59 751 |
| Phone | +420 577 217 520 |
| E-mail | krejcirik@kckcyklosport.cz |
| Web address | www.kckcyklosport.cz |

**Manufacturer**

| | |
|---|---|
| Name or trade name | Nacházel, s.r.o. |
| Address | Průmyslová 11/1472, Praha 10 - Hostivař, 10219<br>Czech Republic |
| Identification number (CRN) | 25734458 |
| VAT Reg No | CZ25734458 |
| Phone | 222 351 140 |
| E-mail | maziva@nachazel.cz |
| Web address | www.nachazel.cz |

**Competent person responsible for the safety data sheet**

| | |
|---|---|
| Name | Ing. Zdeněk Nacházel |
| E-mail | ing.zdenek@nachazel.cz |

**1.4. Emergency telephone number**

Poisoning information centre, Na Bojišti 1, Praha, Czech Republic, Tel.: non-stop +420 224 919 293 or +420 224 915 402, Information on health risks only - acute poisoning of humans and animals

**SECTION 2: Hazards identification**

**2.1. Substance or mixture classification**

**Classification of the mixture in accordance with Regulation (EC) No 1272/2008**

The mixture is not classified as dangerous according to Regulation (EC) No 1272/2008.

Full text of all classifications and hazard statements is given in the section 16.

**Most serious adverse physico-chemical effects**

Unknown

**Most serious adverse effects on human health and the environment**

Unknown

**2.2. Label elements**

**Precautionary statements**

| | |
|---|---|
| P102 | Keep out of reach of children. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P501 | Dispose of contents/container to in accordance with local regulations. |

**Supplemental information**

EUH 210 Safety data sheet available on request.

**2.3. Other hazards**

Substance does not meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No 1272/2008.

## SECTION 3: Composition/information on ingredients

**3.2. Mixtures**

**Chemical characterization**

Mixture of substances specified below and non-hazardous additives.

**Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment**

| Identification numbers | Substance name | Content in % weight | Classification according to Regulation (EC) No 1272/2008 | Note. |
|---|---|---|---|---|
| Index: 603-183-00-0<br>CAS: 143-22-6<br>EC: 205-592-6<br>Registration number: 01-2119475107-38 | 2-[2-(2-Butoxyethoxy)ethoxy]ethanol | 10-16 | Eye Dam. 1, H318 | 3 |
| Index: 603-140-00-6<br>CAS: 111-46-6<br>EC: 203-872-2<br>Registration number: 01-2119457857-21 | 2,2' -oxybisethanol | 1-5 | Acute Tox. 4, H302<br>STOT RE 2, H373 | |
| Index: 603-107-00-6<br>CAS: 111-77-3<br>EC: 203-906-6<br>Registration number: 01-2119475100-52 | 2-(2-methoxyethoxy)ethanol | 1-<3 | Repr. 2, H361d | 3, 4 |
| Index: 603-096-00-8<br>CAS: 112-34-5<br>EC: 203-961-6<br>Registration number: 01-2119475104-44 | 2-(2-butoxyethoxy)ethanol | 1-1,9 | Eye Irrit. 2, H319 | 1, 2, 3, 4 |

**Notes**

1 Note 1: The concentration stated or, in the absence of such concentrations, the generic concentrations set out in this Regulation are the percentages by weight of the metallic element calculated with reference to the total weight of the mixture.

2 Note 2: The concentration of isocyanate stated is the percentage by weight of the free monomer calculated with reference to the total weight of the mixture.

3 Substance for which exposure limits of Community for working environment exist.

4 The use of the substance is restricted by Annex XVII of REACH Regulation

Full text of all classifications and hazard statements is given in the section 16.

## SECTION 4: First aid measures

**4.1. Description of first aid measures**

If any health problems are manifested or if in doubt, inform a doctor and show him information from this Safety Data Sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled.

**Inhalation**

inapt - Liquid

**Skin contact**

Remove contaminated clothing. Wash the affected skin with lukewarm water and soap or use appropriate cleanser. When irritation persists, seek medical attention.

**Eye contact**

Holding the eyelids open, and at least 15 minutes, rinse with clean, if possible lukewarm, running water and seek medical advice.

**Ingestion**

Place the victim in peace. Rinse mouth with water (only if the affected person is conscious); Never induce vomiting. Seek medical advice immediately and show the container or label.

**4.2. Most important symptoms and effects, both acute and delayed**

**Inhalation**

not available

**Skin contact**

not available

**Eye contact**

not available

**Ingestion**

not available

**4.3. Indication of any immediate medical attention and special treatment needed**

Ensure patient adequate ventilation and oxygenation. There is no specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

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**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media**

alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist

**Unsuitable extinguishing media**

water - full jet

**5.2. Special hazards arising from the substance or mixture**

Fire produces black smoke, with potential development of carbon monoxide and dioxide and other toxic gases. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

**5.3. Advice for firefighters**

Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the product near the fire should be cooled with water. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

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**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

Remove all ignition sources; provide sufficient ventilation. Use personal protective equipment for work. Follow the instructions contained in chapters 7 and 8. The product forms a slick surfaces - danger of slipping.

**6.2. Environmental precautions**

Prevent contamination of the soil and entering surface or ground water. Do not allow to enter drains.

**6.3. Methods and material for containment and cleaning up**

Cover the preparation with a suitable (not flammable) absorption material (sand, diatomaceous earth, soil or other suitable absorbent materials such. Our DRY Absorbent, etc.), Gather in tightly sealed containers and remove as hazardous waste. Collected material should be Disposed of in accordance with locally valid Regulations. When the release of large amounts of preparation inform the fire brigade and the Environment department of the District Office. After removal of the contaminated wash with plenty of water or other suitable detergent.

**6.4. Reference to other sections**

not available

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**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

Prevent contact with skin and eyes. Wear personal protective equipment according to chapter 8. Observe valid safety legislation and upholding health. Aerate and ventilate storerooms and workplaces.

**7.2. Conditions for safe storage, including any incompatibilities**

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. At ambient temperature in the vapor space of containers Flammable mixtures may exist. Minimize sources of ignition, such as. An increase in static electricity, heat and flame. Store in the following materials: Carbon steel. Stainless steel, steel drums phenolic liner.

| | |
|---|---|
| Storage class | 12 - Other non-combustible liquids |
| Content | 0,1 and 1 l |
| Packaging type | bottle |
| Material of package | HDPE (2), High-density (linear) polyethylene (Plastics) |


HDPE

| | |
|---|---|
| Storage temperature | min 0 °C, max 40 °C |

**The specific requirements or rules relating to the substance/mixture**

Keep only in containers that correspond to the original package.

**7.3. Specific end use(s)**

Observe instructions on the product label.

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

The mixture contains substances for which occupational exposure limits are set.

**European Union**

| Substance name (component) | Type | Time of exposure | Value | Note | Source |
|---|---|---|---|---|---|
| 2-[2-(2-Butoxyethoxy)ethoxy] ethanol (CAS: 143-22-6) | TWA | | 50 mg/m³ | | |
| | TWA | | 9 ppm | | |
| 2-(2-methoxyethoxy)ethanol (CAS: 111-77-3) | OEL | 8 hours | 50,1 mg/m³ | | EU limits |
| | OEL | 8 hours | 10 ppm | | |
| 2-(2-butoxyethoxy)ethanol (CAS: 112-34-5) | OEL | 8 hours | 67,5 mg/m³ | | EU limits |
| | OEL | 8 hours | 10 ppm | | |
| | OEL | Short-term | 101,2 mg/m³ | | |
| | OEL | Short-term | 15 ppm | | |

**United Kingdom of Great Britain and Northern Ireland**

| Substance name (component) | Type | Time of exposure | Value | Note | Source |
|---|---|---|---|---|---|
| 2,2' -oxybisethanol (CAS: 111-46-6) | WEL | 8 hours | 101 mg/m³ | | Gestis |
| | WEL | 8 hours | 23 ppm | | |
| 2-(2-methoxyethoxy)ethanol (CAS: 111-77-3) | WEL | 8 hours | 50,1 mg/m³ | | Gestis |

**United Kingdom of Great Britain and Northern Ireland**

| Substance name (component) | Type | Time of exposure | Value | Note | Source |
|---|---|---|---|---|---|
| 2-(2-methoxyethoxy)ethanol (CAS: 111-77-3) | WEL | 8 hours | 10 ppm | | Gestis |
| 2-(2-butoxyethoxy)ethanol (CAS: 112-34-5) | WEL | 8 hours | 67,5 mg/m³ | | Gestis |
| | WEL | Short-term | 101,2 mg/m³ | | |
| | WEL | 8 hours | 10 ppm | | |
| | WEL | Short-term | 15 ppm | | |

**DNEL**

2-(2-butoxyethoxy)ethanol

| Workers / consumers | Route of exposure | Value | Effect | Determining method |
|---|---|---|---|---|
| Workers | Dermal | 20 mg/kg bw/day | Systemic chronic effects | |
| Workers | Inhalation | 67.5 mg/m³ | Local chronic effects | |
| Workers | Dermal | 20 mg/kg bw/day | Systemic chronic effects | |
| Consumers | Inhalation | 50.6 mg/m³ | Local acute effects | |
| Consumers | Oral | 1.25 mg/kg bw/day | Systemic chronic effects | |
| Consumers | Inhalation | 34 mg/m³ | Systemic chronic effects | |
| Workers | Inhalation | 101.2 mg/m³ | Local acute effects | |

2-(2-methoxyethoxy)ethanol

| Workers / consumers | Route of exposure | Value | Effect | Determining method |
|---|---|---|---|---|
| Workers | Dermal | 0.53 mg/kg bw/day | Systemic chronic effects | |
| Workers | Inhalation | 50.1 mg/m³ | Systemic chronic effects | |
| Consumers | Oral | 1.5 mg/kg bw/day | Systemic chronic effects | |
| Consumers | Inhalation | 25 mg/m³ | Systemic chronic effects | |
| Consumers | Dermal | 0.27 mg/kg bw/day | Systemic chronic effects | |

2,2' -oxybisethanol

| Workers / consumers | Route of exposure | Value | Effect | Determining method |
|---|---|---|---|---|
| Workers | Dermal | 106 mg/kg bw/day | Systemic chronic effects | |
| Workers | Inhalation | 60 mg/m³ | Systemic chronic effects | |
| Consumers | Dermal | 53 mg/kg bw/day | Systemic chronic effects | |
| Consumers | Inhalation | 12 mg/m³ | Systemic chronic effects | |

2-[2-(2-Butoxyethoxy)ethoxy]ethanol

| Workers / consumers | Route of exposure | Value | Effect | Determining method |
|---|---|---|---|---|
| Workers | Dermal | 50 mg/kg bw/day | Systemic chronic effects | |
| Workers | Inhalation | 195 mg/m³ | Systemic chronic effects | |
| Consumers | Oral | 2.5 mg/kg bw/day | Systemic chronic effects | |
| Consumers | Inhalation | 117 mg/m³ | Systemic chronic effects | |
| Consumers | Dermal | 25 mg/kg bw/day | Systemic chronic effects | |

**PNEC**

2-(2-butoxyethoxy)ethanol

| Route of exposure | Value | Determining method |
|---|---|---|
| Drinking water | 1 mg/l | |
| Seawater | 0.1 mg/l | |
| Freshwater sediment | 4 mg/kg | |
| Sea sediments | 0.4 mg/kg | |

2-(2-butoxyethoxy)ethanol

| Route of exposure | Value | Determining method |
|---|---|---|
| Microorganisms in wastewater treatment plants | 200 mg/l | |

2-(2-methoxyethoxy)ethanol

| Route of exposure | Value | Determining method |
|---|---|---|
| Drinking water | 12 mg/l | |
| Seawater | 1.2 mg/l | |
| Freshwater sediment | 44.4 mg/kg | |
| Sea sediments | 0.44 mg/kg | |
| Soil (agricultural) | 2.44 mg/kg | |
| Oral | 90 mg/kg | |
| Microorganisms in wastewater treatment plants | 10000 mg/l | |

2,2' -oxybisethanol

| Route of exposure | Value | Determining method |
|---|---|---|
| Drinking water | 10 mg/l | |
| Seawater | 1 mg/l | |
| Freshwater sediment | 20.9 mg/kg | |
| Sea sediments | 2.09 mg/kg | |
| Soil (agricultural) | 1.53 mg/kg | |
| Microorganisms in wastewater treatment plants | 199.5 mg/l | |

2-[2-(2-Butoxyethoxy)ethoxy]ethanol

| Route of exposure | Value | Determining method |
|---|---|---|
| Freshwater environment | 1.5 mg/l | |
| Seawater | 0.15 mg/l | |
| Freshwater sediment | 5.77 mg/kg | |
| Sea sediments | 0.13 mg/kg | |
| Soil (agricultural) | 0.45 mg/kg | |
| Food chain | 111 mg/kg | |
| Microorganisms in wastewater treatment plants | 200 mg/l | |

**8.2. Exposure controls**

Follow usual measures for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. If exposure limits cannot be observed in this mode, suitable protection of airways must be used. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

**Eye/face protection**

Protective goggles or face shield (based on the nature of the work performed).

**Skin protection**

Hand protection: Protective gloves resistant against the product. Observe recommendations of the particular manufacturer of the gloves in the choice of their appropriate thickness, material and permeability. Use barrier creams for skin protection, they should however not be applied once exposure has occurred. Observe other recommendations of the manufacturer. Other protection: Protective antistatic clothing made of natural fibres (cotton) or synthetic fibres resistant against elevated temperatures. Contaminated skin should be washed thoroughly.

**Respiratory protection**

Mask with a filter against organic vapours or a self-contained breathing apparatus as appropriate if exposure limit values of toxic substances are exceeded or in a poorly ventilated environment.

**Thermal hazard**

not available

**Environmental exposure controls**

Observe usual measures for protection of the environment, see Section 6.2.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

| | |
|---|---|
| Appearance | |
| Physical state | liquid at 20°C |
| color | colorless to yellow |
| Odour | data not available |
| Odour threshold | data not available |
| pH | 7 - 11.5 (undiluted) |
| Melting point/freezing point | <-50 °C |
| Initial boiling point and boiling range | >260 °C |
| Flash point | >120 °C |
| Evaporation rate | data not available |
| Flammability (solid, gas) | data not available |
| Upper/lower flammability or explosive limits | |
| flammability limits | data not available |
| explosive limits | data not available |
| Vapour pressure | <0.2 kPa at 20 °C |
| Vapour density | data not available |
| Relative density | data not available |
| Solubility(ies) | |
| solubility in water | soluble |
| solubility in fats | data not available |
| Partition coefficient: n-octanol/water | <2 |
| Auto-ignition temperature | >300 °C |
| Decomposition temperature | 300 °C |
| Viscosity | 5 - 10 cSt při 20oC |
| Explosive properties | data not available |
| Oxidising properties | data not available |
| They are not available | |

### 9.2. Other information

| | |
|---|---|
| Density | 1.03 - 1.09 g/cm$^3$ at 20 °C |
| ignition temperature | data not available |

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The mixture is non-flammable.

### 10.2. Chemical stability

The product is stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Glycol ethers may form during storage of peroxides, can be reacted with light alloys to form hydrogen.

### 10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

### 10.5. Incompatible materials

Protect against strong oxidizing agents. Thereby a dangerous exothermic reaction will be prevented.

### 10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous products are formed at high temperature and in fire, such as carbon monoxide and carbon dioxide, heavy smoke and nitrogen oxides.

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

No toxicological data is available for the mixture.

**Acute toxicity**

Based on available data the classification criteria are not met.

2-(2-butoxyethoxy)ethanol

| Route of exposure | Parameter | Value | Time of exposure | Species | Sex |
|---|---|---|---|---|---|
| Oral | $LD_{50}$ | 3384 mg/kg | | Rat (Rattus norvegicus) | |
| Dermal | $LD_{50}$ | 2700 mg/kg | | Rabbit | |

2,2' -oxybisethanol

| Route of exposure | Parameter | Value | Time of exposure | Species | Sex |
|---|---|---|---|---|---|
| Oral | $LD_{50}$ | 12565 mg/kg | | Rat | |
| Dermal | $LD_{50}$ | 11890 mg/kg | | Rat | |
| Inhalation (dust/mist) | $LC_{50}$ | 0.13 mg/l | 4 hour | Rat (Rattus norvegicus) | |
| Oral | $LD_{50}$ | 19600 mg/kg bw | | | |

2-[2-(2-Butoxyethoxy)ethoxy]ethanol

| Route of exposure | Parameter | Value | Time of exposure | Species | Sex |
|---|---|---|---|---|---|
| Oral | $LD_{50}$ | 5170 mg/kg bw | | | |
| Dermal | $LD_{50}$ | 3540 mg/kg | | Rabbit | |
| Dermal | $LD_{50}$ | 3540 mg/kg bw | | | |
| Inhalation (dust/mist) | $LC_{50}$ | >2.4 mg/l | 4 hour | | |
| Oral | $LD_{50}$ | 5170 mg/kg | | Rat (Rattus norvegicus) | |

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| Route of exposure | Parameter | Value | Time of exposure | Species | Sex |
|---|---|---|---|---|---|
| Oral | $LD_{50}$ | >5000 mg/kg | | Rat | |
| Dermal | $LD_{50}$ | >3000 mg/kg | | Rabbit | |

**Skin corrosion/irritation**

Based on available data the classification criteria are not met.

**Serious eye damage/irritation**

It causes serious eye irritation.

**Respiratory or skin sensitisation**

Based on available data the classification criteria are not met.

**Germ cell mutagenicity**

Based on available data the classification criteria are not met.

**Carcinogenicity**

Based on available data the classification criteria are not met.

**Reproductive toxicity**

Some ingredients show these effects.

**Toxicity for specific target organ - single exposure**
Based on available data the classification criteria are not met.

**Toxicity for specific target organ - repeated exposure**
Based on available data the classification criteria are not met.

**Aspiration hazard**
Based on available data the classification criteria are not met.

**More information**
They are not available

## SECTION 12: Ecological information

### 12.1. Toxicity

**Acute toxicity**
The product contains no substances with an effect against active action of microorganisms.

2,2' -oxybisethanol

| Parameter | Method | Value | Time of exposure | Species | Environment |
|---|---|---|---|---|---|
| $LC_{50}$ | | 75200 mg/l | | Fishes (Oncorhynchus mykiss) | |
| $EC_{50}$ | | >10000 mg/l | 72 hour | Other aquatic organisms | |

2-[2-(2-Butoxyethoxy)ethoxy]ethanol

| Parameter | Method | Value | Time of exposure | Species | Environment |
|---|---|---|---|---|---|
| $LC_{50}$ | | >2200 mg/l | 96 hour | Fishes (Oncorhynchus mykiss) | |
| $EC_{50}$ | | >500 mg/l | 48 hour | Daphnia (Daphnia magna) | |
| $EC_{50}$ | | >5000 mg/l | 16 hour | Other aquatic organisms | |
| $EC_{50}$ | | 2210 mg/l | 72 hour | Other aquatic organisms | |
| $ErC_{50}$ | | 2490 mg/l | 72 hour | Algae and other aquatic plants | |
| Log Pow | | 0.51 | | | |
| Log Koc | | 10 | | | |

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| Parameter | Method | Value | Time of exposure | Species | Environment |
|---|---|---|---|---|---|
| $LC_{50}$ | | >100 mg/l | 96 hour | Fishes (Oncorhynchus mykiss) | |
| $EC_{50}$ | OECD 202 | nestanoveno mg/l | | Daphnia (Daphnia magna) | |

**More information**
They are not available

### 12.2. Persistence and degradability

**Biodegradability**

2-[2-(2-Butoxyethoxy)ethoxy]ethanol

| Parameter | Method | Value | Time of exposure | Environment | Result |
|---|---|---|---|---|---|
| | OECD 301D | 85 % | 28 day | | |

The product is quickly biodegradable - 100% during 21 days. (OECD 302B).

**12.3. Bioaccumulative potential**

Insignificant.

**12.4. Mobility in soil**

The product is soluble and mobile in water and soil. Contamination of water courses may occur in case of rain.

**12.5. Results of PBT and vPvB assessment**

The product is not classified as PBT or vPvB.

**12.6. Other adverse effects**

Water hazard class: WGK 1

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods**

Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to an authorised person for waste removal (specialized company) authorised for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling. Hazard of environmental contamination; remove waste in accordance with local and/or national regulations.

**Waste management legislation**

Council Directive 75/442/EEC on waste, as last amended. Council Directive 91/689/EEC on hazardous waste, as last amended. Decision 94/3/EC establishing a list of wastes, as last amended.

**Waste type code**

16 01 13 brake fluids

**Packaging waste type code**

15 01 02 plastic packaging

## SECTION 14: Transport information

**14.1. UN number**

Not subject to ADR.

**14.2. UN proper shipping name**

not available

**14.3. Transport hazard class(es)**

not available

**14.4. Packing group**

not available

**14.5. Environmental hazards**

not available

**14.6. Special precautions for user**

not available

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

Not dangerous goods

**SECTION 15: Regulatory information**

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

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended.

**15.2. Chemical safety assessment**

The product was not prepared a chemical safety report.

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**SECTION 16: Other information**

**A list of standard risk phrases used in the safety data sheet**

| | |
|---|---|
| H302 | Harmful if swallowed. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H361d | Suspected of damaging the unborn child. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |

**Guidelines for safe handling used in the safety data sheet**

| | |
|---|---|
| P102 | Keep out of reach of children. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P501 | Dispose of contents/container to in accordance with local regulations. |

**A list of additional standard phrases used in the safety data sheet**

| | |
|---|---|
| EUH 210 | Safety data sheet available on request. |

**Other important information about human health protection**

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per Section 1. The user is responsible for adherence to all related health protection regulations.

**Key to abbreviations and acronyms used in the safety data sheet**

| | |
|---|---|
| ADR | European agreement concerning the international carriage of dangerous goods by road |
| BCF | Bioconcentration Factor |
| CAS | Chemical Abstracts Service |
| CLP | Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures |
| DNEL | Derived no-effect level |
| EC | Identification code for each substance listed in EINECS |
| $EC_{50}$ | Concentration of a substance when it is affected 50% of the population |
| EINECS | European Inventory of Existing Commercial Chemical Substances |
| EmS | Emergency plan |
| EU | European Union |
| IATA | International Air Transport Association |
| IBC | International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals |
| $IC_{50}$ | Concentration causing 50% blockade |
| ICAO | International Civil Aviation Organization |
| IMDG | International Maritime Dangerous Goods |
| INCI | International Nomenclature of Cosmetic Ingredients |
| ISO | International Organization for Standardization |
| IUPAC | International Union of Pure and Applied Chemistry |
| $LC_{50}$ | Lethal concentration of a substance in which it can be expected death of 50% of the population |
| $LD_{50}$ | Lethal dose of a substance in which it can be expected death of 50% of the population |
| LOAEC | Lowest observed adverse effect concentration |
| LOAEL | Lowest observed adverse effect level |
| log Kow | Octanol-water partition coefficient |

| | |
|---|---|
| MARPOL | International Convention for the Prevention of Pollution From Ships |
| NOAEC | No observed adverse effect concentration |
| NOAEL | No observed adverse effect level |
| NOEC | No observed effect concentration |
| NOEL | No observed effect level |
| OEL | Occupational Exposure Limits |
| PBT | Persistent, Bioaccumulative and Toxic |
| PNEC | Predicted no-effect concentration |
| ppm | Parts per million |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals |
| RID | Agreement on the transport of dangerous goods by rail |
| UN | Four-figure identification number of the substance or article taken from the UN Model Regulations |
| UVCB | Substances of unknown or variable composition, complex reaction products or biological materials |
| VOC | Volatile organic compounds |
| vPvB | Very Persistent and very Bioaccumulative |

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Eye Dam. | Serious eye damage |
| Eye Irrit. | Eye irritation |
| Repr. | Reproductive toxicity |
| STOT RE | Specific target organ toxicity - repeated exposure |

**Training guidelines**

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

**Recommended restrictions of use**

Do not use for purposes other than declared.

**Information about data sources used to compile the Safety Data Sheet**

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Publication of "Zásady pro poskytování první pomoci při expozici chemickým látkám" (doc. MUDr. Daniela Pelclová, CSc., MUDr. Alexandr Fuchs, CSc., MUDr. Miroslava Hornychová, CSc., MUDr. Zdeňka Trávníčková, CSc., Jiřina Fridrichovská, prom. chem.). Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

**The changes (which information has been added, deleted or modified)**

1.1. - the concentration of the substances contained and deletion of sentences P 301 + 310

**Statement**

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.