# SAFETY DATA SHEET ACCORDING TO REGULATION (EC) 1907/2006

**Product name: MARA HIDROL HM 68**

**Creation date: 27.11.2024, Revision: 27.11.2024, Version: 1.1**

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifier

**Product name**

MARA HIDROL HM 68

https://my.chemius.net/p/IG8QB1/en/pd/en

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

**Relevant identified uses**

Hydraulic oil.

**Uses advised against**

Do not use for purposes other than those prescribed.

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

**Supplier**

Mapetrol d.o.o.
Linhartova ulica 17a
2000 Maribor, Slovenia
+38622302880
lab@mapetrol.si

### 1.4 Emergency Telephone Number

**Emergency**

111

**Supplier**

+38622302880

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008 (CLP)**

According to the regulation, the chemical is not classified as hazardous.

### 2.2 Label elements

**Labelling according to Regulation (EC) No 1272/2008 (CLP)**

P102 Keep out of reach of children.

### 2.3 Other hazards

**PBT/vPvB**

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.

### Endocrine disrupting properties

The mixture does not contain substances that are included in the list of substances with endocrine disrupting properties established in accordance with Article 59 of the REACH Regulation, in a concentration ≥ 0.1 w/w %. The mixture does not contain substances identified as substances with endocrine disrupting properties according to the criteria of Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605, in a concentration ≥ 0.1 w/w %.

### Additional information

The mixture is not flammable, but is combustible.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

For mixtures see 3.2.

### 3.2 Mixtures

| Name | CAS EC Index Reach | % | Classification according to Regulation (EC) No 1272/2008 (CLP) | Specific Concentration Limits | Notes for substances |
|---|---|---|---|---|---|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | 64742-65-0<br>265-169-7<br>649-474-00-6 | 45-<100 | / | / | L |
| distillates (petroleum), solvent-dewaxed light paraffinic | 64742-56-9<br>265-159-2<br>649-469-00-9 | 0<40 | / | / | L |
| Residual oils (petroleum), solvent-dewaxed | 64742-62-7<br>265-166-0<br>649-471-00-X | 0<15 | / | / | L |

### Notes for substances

| | |
|---|---|
| L | The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 "Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method", Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3. |

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General notes

Never give anything by mouth to an unconscious person. Place patient in recovery position and ensure airway patency. When in doubt or if feeling unwell seek medical assistance. Show the safety data sheet and label to the physician.

#### Following inhalation

Remove patient to fresh air - move out of dangerous area. Victim should rest in a warm place. Keep at rest in a position comfortable for breathing. In case of unconsciousness bring patient into stable side position and seek medical attention. If breathing is difficult, give oxygen. If breathing is irregular or respiratory arrest occurs provide artificial respiration. Obtain professional medical help!

#### Following skin contact

Immediately remove contaminated clothing. Wash body parts that have come into contact with the product with water and mild soap. If symptoms develop and persist, seek medical attention.

#### Following eye contact

Immediately flush eyes with running water, keeping eyelids apart. Remove contact lenses, if present and easy to do. If irritation persists, seek professional medical attention. Avoid strong water jet - risk of cornea damage.

#### Following ingestion

Do not induce vomiting! Immediately consult a doctor. If vomiting occurs, the patient should hold the head lower than

the hips, because it reduces the possibility of aspiration. Drink plenty of water in small sips. Never give anything by mouth to an unconscious person. Do not drink milk or alcoholic beverages.

### 4.2 Most important symptoms and effects, both acute and delayed

**Following inhalation**

Excessive exposure to spray mist, fog, or vapours may cause respiratory irritation. Coughing, sneezing, nasal discharge, labored breathing.

**Following skin contact**

Contact with skin may cause irritation (redness, itching).

**Following eye contact**

Contact with eyes can cause irritation (redness, tearing, pain).

**Following ingestion**

May cause nausea/vomiting and diarrhea. May cause abdominal discomfort.

### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media**

Carbon dioxide. Dry chemical powder. Alcohol resistant foam.

**Unsuitable extinguishing media**

Do not use water jet as an extinguisher, as this will spread the fire.

### 5.2 Special hazards arising from the substance or mixture

**Hazardous combustion products**

In case of a fire toxic gases can be generated; do not inhale gases/smoke. In the event of fire the following can be generated: carbon monoxide (CO), carbon dioxide ($CO_2$). Combustion products may include unidentified organic and inorganic compounds.

### 5.3 Advice for firefighters

**Protective actions**

In case of fire or heating do not breathe fumes/vapours. No action shall be taken involving any personal risk or without suitable training. In case of fire evacuate the area. Cool containers at risk with water spray. If possible remove containers from endangered area.

**Special protective equipment for fire-fighters**

Firefighters should wear appropriate protective clothing for firefighters (including helmets, protective boots and gloves) (BS EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (BS EN 137).

**Additional information**

Contaminated firefighting water must be disposed of in accordance with the regulations; do not allow to reach the sewage system.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel**

**Protective equipment**

Wear suitable protective equipment; see Section 8.

**Precautionary measures**

Ensure adequate ventilation. Keep away from sources of ignition and/or heat; No smoking!

**Emergency procedures**

No action shall be taken involving any personal risk or without suitable training. Prevent access to unprotected personnel. Evacuate the danger zone. Do not breathe vapour or mist. Avoid contact with skin, eyes and clothing.

**For emergency responders**

Use personal protective equipment.

### 6.2 Environmental precautions

Do not allow product to reach water/drains/sewage systems or permeable soil. If accidental large entry into water or ground occurs, inform responsible authorities.

### 6.3 Methods and material for containment and cleaning up

**For containment**

Stem the spill if this does not pose risks.

**For cleaning up**

Absorb product (with inert material), collect it in special container and dispose it to a licensed hazardous-waste disposal contractor. Larger quantities should be separated by a dike and then pumped into suitable tanks. Hand the waste over to an authorized waste disposal facility. Clean contaminated area with water and detergent. Collect and dispose of contaminated washing water. Dispose in accordance with applicable regulations (see Section 13). If necessary, provide the help of experts who deal with this type of accident.

**Other information**

No information.

### 6.4 Reference to other sections

See also sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

**Protective measures**

**Measures to prevent fire**

Ensure adequate ventilation. Keep away from sources of ignition - no smoking.

**Measures to prevent aerosol and dust generation**

Use general or local exhaust ventilation to prevent inhaling vapours and aerosols.

**Measures to protect the environment**

Do not discharge into drains, surface water and soil. After use immediately close container tightly.

**Other measures**

No information.

**Advice on general occupational hygiene**

Adhere to the workplace limit values and / or other threshold values. Do not breathe vapours/mist. Ensure adequate ventilation. Avoid contact with skin, eyes and clothes. Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke while working. Use good personal hygiene practices – wash hands at breaks and when done working with material. Before entering areas where food is eaten, remove contaminated clothing and protective equipment. Remove contaminated clothes and wash them before reuse. Wear suitable protective equipment; see Section 8.

### 7.2 Conditions for safe storage, including any incompatibilities

**Technical measures and storage conditions**

Store in accordance with local regulations. Keep in tightly closed container. Keep away from moisture and water. Keep in

a cool, dry and well ventilated place. Keep away from incompatible products (see section 10). Protect from open fire, heat and direct sunlight. Keep away from strong oxidising agents.

**Packaging materials**
Store only in original container.

**Requirements for storage rooms and vessels**
Floors and walls must be resistant to chemicals. Close opened containers after use. Put the containers upright to prevent from leaking. Do not store in unlabelled containers.

**Storage temperature**
No information.

**Storage class**
No information.

**Further information on storage conditions**
No information.

### 7.3 Specific end use(s)

**Recommendations**
See identified uses in Section 1.2.

**Industrial sector specific solutions**
No information.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Occupational Exposure limit values**

| Name | mg/m$^3$ | ml/m$^3$ | Short-term value mg/m$^3$ | Short-term value ml/m$^3$ | Remark | Biological Tolerance Values |
|---|---|---|---|---|---|---|
| Cycloalkanes ≥C7 | 800 | / | / | / | / | / |
| Normal and branched chain alkanes ≥C7 | 1200 | / | / | / | / | / |

**Information on monitoring procedures**
BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 689:2018 Workplace exposure. Measurement of exposure by inhalation to chemical agents. Strategy for testing compliance with occupational exposure limit values. BS EN 482:2021 Workplace exposure. Procedures for the determination of the concentration of chemical agents. Basic performance requirements.

**DNEL/DMEL values**

**For product**
No information.

**For components**
No information.

**PNEC values**

**For product**
No information.

**For components**
No information.

### 8.2 Exposure controls

**Appropriate engineering control**

**Substance/mixture related measures to prevent exposure during identified uses**
Use good personal hygiene practices – wash hands at breaks and when done working with material. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothes. Do not eat, drink or smoke while working. Do not breathe vapours/aerosols. The personal protective equipment is required only for professional use

or for large packs (not for domestic packages). For consumer use, please follow the recommendations appearing on the product label.

#### Structural measures to prevent exposure
No information.

#### Organisational measures to prevent exposure
Remove all contaminated clothes immediately and wash them before reuse. Keep eyewash bottles or personal eyewash units and emergency showers available.

#### Technical measures to prevent exposure
Provide good ventilation and local exhaust in areas with increased concentration. Keep away from food, drink and animal feeding stuffs.

#### Personal protective equipment
#### Eye and face protection
If there is risk of splashing into eyes, wear safety glasses with side shields (BS EN ISO 16321-1:2022).

#### Hand protection
Use chemical resistant gloves classified according to standard BS EN ISO 374. Gloves must be periodically inspected and replaced in case of wear, perforation or contamination.

#### Appropriate materials

| Material | Thickness | Penetration Time | Remark |
|---|---|---|---|
| viton | / | / | / |
| Butyl rubber | / | / | / |

#### Skin protection
Cotton protective clothing and shoes that cover the entire foot (EN ISO 20345:2022). Protective work clothing resistant to liquid chemicals (BS EN 14605:2005+A1:2009). At high risk of skin exposure chemical suits (BS EN 13034:2005+A1:2009) and boots may be required (BS EN ISO 20345:2022+A1:2024).

#### Respiratory protection
In case of insufficient ventilation wear suitable respiratory protection. Wear suitable protective breathing mask (EN 136) with filter A2-P2 (EN 14387). For dust/gas/ vapor concentrations above the applicable filter limit, in case of oxygen concentrations below 17% or in vague conditions, autonomous self-contained breathing apparatus should be used, according to standard BS EN 137, BS EN 138.

#### Thermal hazards
No information.

#### Environmental exposure controls
#### Substance/mixture related measures to prevent exposure
No information.

#### Instruction measures to prevent exposure
No information.

#### Organisational measures to prevent exposure
No information.

#### Technical measures to prevent exposure
Do not allow product to reach drains, sewage systems or ground water.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

#### Important health, safety and environmental information

| | |
|---|---|
| Physical state | liquid |
| Shape | No information. |
| Colour | No information. |
| Odour | No information. |
| Odour threshold | No information. |
| Melting/freezing point or softening point | No information. |
| Boiling point or initial boiling point and boiling range | No information. |
| Flammability | No information. |

| | |
|---|---|
| Lower and upper explosion limit | No information. |
| Flash point | 220 — 230 °C |
| Auto-ignition temperature | No information. |
| Decomposition temperature | No information. |
| pH | No information. |
| Viscosity (kinematic) | 32 — 100 $mm^2/s$ at 40 °C<br>95 — 100 (Viscosity index) |
| Solubility | No information. |
| Partition coefficient n-octanol/water (log value) | No information. |
| Vapour pressure | No information. |
| Density | 872 — 892 $kg/m^3$ at 15 °C |
| Relative vapour/gas density | No information. |
| Particle characteristics | No information. |

### 9.2 Other information

#### Information with regard to physical hazard classes

No information.

#### Other safety characteristics

| | |
|---|---|
| Pour point | -27 — -17 °C |

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity

The product is not reactive under normal conditions of use, storage and transport.

### 10.2 Chemical stability

Product is stable under normal conditions of use, recommended handling and storage conditions.

### 10.3 Possibility of hazardous reactions

There are no known hazardous reactions.

### 10.4 Conditions to avoid

Protect from heat, direct sunlight, open fire, sparks. Avoid contact with incompatible materials.

### 10.5 Incompatible materials

Strong oxidising agents.

### 10.6 Hazardous decomposition products

Under normal use conditions no hazardous decomposition products are expected. In case of fire/explosion vapours/gases that pose a health hazard are released. Hazardous combustion products, see Section 5 of the safety data sheet.

## SECTION 11: TOXICOLOGICAL INFORMATION

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

### (a) Acute toxicity

For components

| Name | Exposure route | Type | Species | Time | Value | Method | Remark |
|---|---|---|---|---|---|---|---|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | oral | $LD_{50}$ | rat | / | > 5000 mg/kg bw | / | / |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | dermal | $LD_{50}$ | rabbit | / | > 2000 mg/kg | / | / |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | inhalation | $LC_{50}$ | rat | / | > 5.53 mg/L/4h | / | / |
| distillates (petroleum), solvent-dewaxed light paraffinic | oral | $LD_{50}$ | rat | / | > 5000 mg/kg | / | / |
| distillates (petroleum), solvent-dewaxed light paraffinic | dermal | $LD_{50}$ | rabbit | / | > 2000 mg/kg | / | / |
| distillates (petroleum), solvent-dewaxed light paraffinic | inhalation | $LC_{50}$ | rat | 4 h | > 5.53 mg/l | / | / |

Additional information

The product is not classified as acutely toxic.

### (b) Skin corrosion/irritation

No information.

Additional information

The product is not classified as irritating to the skin.

### (c) Serious eye damage/irritation

No information.

Additional information

The product is not classified as an irritant to the eyes.

### (d) Respiratory or skin sensitisation

No information.

Additional information

The product is not classified as sensitising.

### (e) (Germ cell) mutagenicity

No information.

### (f) Carcinogenicity

No information.

### (g) Reproductive toxicity

No information.

Summary of evaluation of the CMR properties

The product is not classified as carcinogenic, mutagenic or toxic for reproduction.

### (h) STOT-single exposure

No information.

Additional information

STOT SE (single exposure): Not classified.

### (i) STOT-repeated exposure

No information.

Additional information

STOT RE (repeated exposure): Not classified.

### (j) Aspiration hazard

No information.

Additional information

Aspiration hazard: Not classified.

Symptoms related to the physical, chemical and toxicological characteristics

No information.

Interactive effects

No information.

### 11.2 Information on other hazards

Endocrine disrupting properties

For product

The mixture does not contain substances that are included in the list of substances with endocrine disrupting properties established in accordance with Article 59 of the REACH Regulation, in a concentration ≥ 0.1 w/w %. The mixture does not contain substances identified as substances with endocrine disrupting properties according to the criteria of Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605, in a concentration ≥ 0.1 w/w %.

Other information

No information.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity

Acute (short-term) toxicity

No information.

Chronic (long-term) toxicity

No information.

### 12.2 Persistence and degradability

Abiotic degradation, physical- and photo-chemical elimination

No information.

Biodegradation

For components

| Name | Type | Rate | Time | Evaluation | Method | Remark |
|---|---|---|---|---|---|---|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | / | / | / | inherently biodegradable | / | / |
| distillates (petroleum), solvent-dewaxed light paraffinic | / | / | / | inherently biodegradable | / | / |

### 12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log value)

For components

| Name | Value | Temperature °C | pH | Concentration | Method |
|---|---|---|---|---|---|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | > 6 | / | / | / | / |
| distillates (petroleum), solvent-dewaxed light paraffinic | > 6 | / | / | / | / |
| Residual oils (petroleum), solvent-dewaxed | > 6 | / | / | / | / |

Bioconcentration factor (BCF)

For components

| Name | Species | Organism | Value | Duration | Evaluation | Method | Remark |
|---|---|---|---|---|---|---|---|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | / | / | / | / | Potentially bioaccumulative. | / | / |
| distillates (petroleum), solvent-dewaxed light paraffinic | / | / | / | / | Potentially bioaccumulative. | / | / |
| Residual oils (petroleum), solvent-dewaxed | / | / | / | / | Potentially bioaccumulative. | / | / |

### 12.4 Mobility in soil

Known or predicted distribution to environmental compartments

No information.

Surface tension

No information.

Adsorption/Desorption

No information.

### 12.5 Results of PBT and vPvB 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

For product

The mixture does not contain substances that are included in the list of substances with endocrine disrupting properties established in accordance with Article 59 of the REACH Regulation, in a concentration ≥ 0.1 w/w %. The mixture does not contain substances identified as substances with endocrine disrupting properties according to the criteria of Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605, in a concentration ≥ 0.1 w/w %.

### 12.7 Other adverse effects

No information.

### 12.8 Additional information

For product

Product is not classified as hazardous for environment. Do not allow to reach ground water, water courses or sewage system.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Product / Packaging disposal

Waste chemical

Dispose of in accordance with applicable waste disposal regulation. The generation of waste should be avoided or minimized wherever possible. Do not allow product to reach drains/sewage systems. Dispose the product to an authorised collector/remover of waste/company performing waste recovery.

Waste codes / waste designations according to LoW

No information.

**Packaging**
Dispose of in accordance with applicable waste disposal regulation. Deliver completely emptied containers to approved waste disposal authorities. Uncleaned packaging must be treated as waste preparation.

**Waste codes / waste designations according to LoW**
No information.

**Waste treatment-relevant information**
No information.

**Sewage disposal-relevant information**
No information.

**Other disposal recommendations**
No information.

## SECTION 14: TRANSPORT INFORMATION

| ADR/RID | IMDG | IATA | ADN |
|---|---|---|---|
| 14.1 UN number or ID number | | | |
| Not dangerous according to transport regulations. | Not dangerous according to transport regulations. | Not dangerous according to transport regulations. | Not dangerous according to transport regulations. |
| 14.2 UN proper shipping name | | | |
| Not given/not applicable | Not given/not applicable | Not given/not applicable | Not given/not applicable |
| 14.3 Transport hazard class(es) | | | |
| Not given/not applicable | Not given/not applicable | Not given/not applicable | Not given/not applicable |
| | | | |
| 14.4 Packing group | | | |
| Not given/not applicable | Not given/not applicable | Not given/not applicable | Not given/not applicable |
| 14.5 Environmental hazards | | | |
| NO | NO | NO | NO |
| 14.6 Special precautions for user | | | |
| Limited quantities<br>Not given/not applicable | Limited quantities<br>Not given/not applicable | | Limited quantities<br>Not given/not applicable |
| 14.7 Maritime transport in bulk according to IMO instruments | | | |
| | Not given/not applicable | | |

## SECTION 15: REGULATORY INFORMATION

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

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (including last amendment Commission Regulation (EU) 2020/878)

- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

**Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline)**
not applicable

**Ingredients according to Regulation (EC) No 648/2004 on detergents**
No information.

**Special instructions**
No information.

### 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## SECTION 16: OTHER INFORMATION

**Indication of changes**
No information.

**Key literature references and sources for data**
No information.

**Abbreviations and acronyms**
ATE - Acute Toxicity Estimate
ADR - Agreement concerning the International Carriage of Dangerous Goods by Road
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CEN - European Committee for Standardisation
C&L - Classification and Labelling
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
CAS# - Chemical Abstracts Service number
CMR - Carcinogen, Mutagen, or Reproductive Toxicant
CSA - Chemical Safety Assessment
CSR - Chemical Safety Report
DMEL - Derived Minimal Effect Level
DNEL - Derived No Effect Level
DPD - Dangerous Preparations Directive 1999/45/EC
DSD - Dangerous Substances Directive 67/548/EEC
DU - Downstream User
EC - European Community
ECHA - European Chemicals Agency
EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)
EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)
EEC - European Economic Community
EINECS - European Inventory of Existing Commercial Substances
ELINCS - European List of notified Chemical Substances
EN - European Standard
EQS - Environmental Quality Standard
EU - European Union
Euphrac - European Phrase Catalogue
EWC - European Waste Catalogue (replaced by LoW – see below)
GES - Generic Exposure Scenario
GHS - Globally Harmonized System
IATA - International Air Transport Association
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG - International Maritime Dangerous Goods
IMSBC - International Maritime Solid Bulk Cargoes
IT - Information Technology
IUCLID - International Uniform Chemical Information Database
IUPAC - International Union for Pure Applied Chemistry
JRC - Joint Research Centre
Kow - octanol-water partition coefficient
LC50 - Lethal Concentration to 50 % of a test population
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)
LE - Legal Entity
LoW - List of Wastes (see http://ec.europa.eu/environment/waste/framework/list.htm)
LR - Lead Registrant
M/I - Manufacturer / Importer
MS - Member States
MSDS - Material Safety Data Sheet

OC - Operational Conditions
OECD - Organization for Economic Co-operation and Development
OEL - Occupational Exposure Limit
OJ - Official Journal
OR - Only Representative
OSHA - European Agency for Safety and Health at work
PBT - Persistent, Bioaccumulative and Toxic substance
PEC - Predicted Effect Concentration
PNEC(s) - Predicted No Effect Concentration(s)
PPE - Personal Protection Equipment
(Q)SAR - Qualitative Structure Activity Relationship
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals (Regulation (EC) No 1907/2006)
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
RIP - REACH Implementation Project
RMM - Risk Management Measure
SCBA - Self-Contained Breathing Apparatus
SDS - Safety data sheet
SIEF - Substance Information Exchange Forum
SME - Small and Medium sized Enterprises
STOT - Specific Target Organ Toxicity
(STOT) RE - Repeated Exposure
(STOT) SE - Single Exposure
SVHC - Substances of Very High Concern
UN - United Nations
vPvB - Very Persistent and Very Bioaccumulative

**List of relevant H phrases**

No information.




- ☑ Provided correct labelling of the product
- ☑ Compliance with the local legislation
- ☑ Provided correct classification of the product
- ☑ Provided adequate transport data

BENS © Consulting | www.bens-consulting.com

*The information of this SDS is based on the present state of our knowledge and meets the requirements of EU and national laws. The user's working conditions however, are beyond our knowledge and control. The product is not to be used for purposes other than those specified under section 1 without a written permission. It remains the responsibility of the user to ensure that the necessary steps are taken to meet the laws and regulations. Handling of the product may only be done by people above 18 years of age, who are satisfactorily informed of how to do the work, the hazardous properties and necessary safety precautions. The information given in this SDS is to describe the product only in terms of health and safety requirements and should not, therefore, be construed as guaranteeing specific properties.*