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

1.1 Product identifier

<table>
<thead>
<tr>
<th>Product name</th>
<th>SeaMate M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product code</td>
<td>28901</td>
</tr>
<tr>
<td>Product description</td>
<td>Paint.</td>
</tr>
<tr>
<td>Product type</td>
<td>Liquid.</td>
</tr>
<tr>
<td>Other means of identification</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Identified uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses in Coatings - Professional use</td>
</tr>
</tbody>
</table>

1.3 Details of the supplier of the safety data sheet

MANUFACTURER/SUPPLIER:
Jotun Paints (Europe) Ltd.
Stather Road
Flixborough, Scunthorpe
North Lincolnshire
DN15 8RR
England

Tel: +44 17 24 40 00 00
Fax: +44 17 24 40 01 00
SDSJotun@jotun.com

1.4 Emergency telephone number

Contact NHS Direct; phone 0845 4647 or 111. Open 24/7.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

| Product definition | Mixture               |

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 3, H226
Acute Tox. 4, H302
Acute Tox. 4, H332
Skin Irrit. 2, H315
Eye Dam. 1, H318
Skin Sens. 1, H317
Repr. 2, H361d (Unborn child)
Aquatic Acute 1, H400
Aquatic Chronic 1, H410

2.2 Label elements

Hazard pictograms:

- Flammable
- Corrosive
- Harmful
- Caution
- Aquatic toxicity
SeaMate M

SECTION 2: Hazards identification

Signal word : Danger.

Hazard statements:
- P226 - Flammable liquid and vapour.
- H302 + H332 - Harmful if swallowed or if inhaled.
- H318 - Causes serious eye damage.
- H315 - Causes skin irritation.
- H317 - May cause an allergic skin reaction.
- H361d - Suspected of damaging the unborn child.
- H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements:

General : Not applicable.

Prevention:
- P201 - Obtain special instructions before use.
- P261 - Avoid breathing vapour.
- P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.
- P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P271 - Use only outdoors or in a well-ventilated area.
- P273 - Avoid release to the environment.

Response:
- P201 - Obtain special instructions before use.
- P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P271 - Use only outdoors or in a well-ventilated area.
- P273 - Avoid release to the environment.

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

Disposal:
- P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients:
- dicopper oxide
- xylene
- colophony
- zineb
- bis(1-hydroxy-1h-pyridine-2-thionato-o,s)copper

Supplemental label elements : Not applicable.

Additional information:
- Antifouling. Active substances: dicopper oxide (CAS 1317-39-1) 32.6% w/w, zineb (CAS 12122-67-7) 4.6 % w/w, copper pyrithione (CAS 14915-37-8) 2.7 % w/w. Read Technical Data Sheet and Safety Data Sheet before use. Do not reuse empty containers. For professional use only.

Additional information:
- PCS Number DR: 97965, LR: 97966

Additional information:
- HSE No. 9877 DO NOT BREATHE SPRAY MIST. WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS OF A CONTRASTING COLOUR TO THE PRODUCT BEING APPLIED, UNDERNEATH A DISPOSABLE COVERALL WITH HOOD), SUITABLE GLOVES AND IMPERVIOUS FOOTWEAR THAT PROTECTS THE LOWER LEG. WEAR SUITABLE RESPIRATORY EQUIPMENT (such as air-fed respiratory protective equipment with combined protective helmet and visor) when spraying. WEAR SUITABLE RESPIRATORY EQUIPMENT (such as FFP3 or an equivalent standard) when working in the vicinity of the spray plume. DISPOSE OF PROTECTIVE GLOVES after use.

In compliance:
- IMO Antifouling System Convention compliant (AFS/CONF/26).

2.3 Other hazards:

Other hazards which do not result in classification : None known.

Date of issue : 26.10.2017
### SECTION 3: Composition/information on ingredients

<table>
<thead>
<tr>
<th>Substance/mixture</th>
<th>Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product/ingredient name</strong></td>
<td><strong>Identifiers</strong></td>
</tr>
<tr>
<td>colophony</td>
<td>REACH #: 01-2119480418-32 EC: 232-475-7 CAS: 8050-09-7 Index: 650-015-00-7</td>
</tr>
<tr>
<td>bis(1-hydroxy-1h-pyridine-2-thionato-o,s)copper</td>
<td>EC: 238-984-0 CAS: 14915-37-8</td>
</tr>
<tr>
<td>zinc oxide</td>
<td>REACH #: 01-2119463881-32 EC: 215-222-5 CAS: 1314-13-2 Index: 030-013-00-7</td>
</tr>
</tbody>
</table>

See Section 16 for the full text of the H statements declared above.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

**Type**

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit
[5] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.
SECTION 4: First aid measures

4.1 Description of first aid measures

**General**: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.

**Inhalation**: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

**Skin contact**: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

**Eye contact**: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

**Ingestion**: If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.

**Protection of first-aiders**: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains colophony, zineb. May produce an allergic reaction.

**Potential acute health effects**

**Eye contact**: Causes serious eye damage.

**Inhalation**: Harmful if inhaled.

**Skin contact**: Causes skin irritation. May cause an allergic skin reaction.

**Ingestion**: Harmful if swallowed.

**Over-exposure signs/symptoms**

**Eye contact**: Adverse symptoms may include the following:
- pain
- watering
- redness

**Inhalation**: Adverse symptoms may include the following:
- reduced foetal weight
- increase in foetal deaths
- skeletal malformations

**Skin contact**: Adverse symptoms may include the following:
- pain or irritation
- blistering may occur
- reduced foetal weight
- increase in foetal deaths
- skeletal malformations

Date of issue : 26.10.2017
SECTION 4: First aid measures

Notes to physician
In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments
No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media
Recommended: alcohol-resistant foam, CO₂, powders, water spray.

Unsuitable extinguishing media
Do not use water jet.

5.2 Special hazards arising from the substance or mixture
Hazards from the substance or mixture
Flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products
Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
metal oxide/oxides

5.3 Advice for firefighters
Special protective actions for fire-fighters
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
For non-emergency personnel
No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders
If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel."

6.2 Environmental precautions
Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Date of issue
26.10.2017
SECTION 6: Accidental release measures

6.3 Methods and material for containment and cleaning up

**Small spill**
Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill**
Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

6.4 Reference to other sections
See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling
Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Mixture may charge electrostatically; always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing and floors should be of the conducting type. Keep away from heat, sparks and flame. No sparking tools should be used. 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. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see Section 8). Never use pressure to empty. Container is not a pressure vessel. Always keep in containers made from the same material as the original one. Comply with the health and safety at work laws. Do not allow to enter drains or watercourses.

Information on fire and explosion protection
Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

7.2 Conditions for safe storage, including any incompatibilities
Store in accordance with local regulations.
Notes on joint storage
Keep away from: oxidising agents, strong alkalis, strong acids.
Additional information on storage conditions
Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)
Recommendations
Not available.
Industrial sector specific solutions
Not available.

Date of issue: 26.10.2017
SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Exposure limit values</th>
</tr>
</thead>
<tbody>
<tr>
<td>xylene</td>
<td>EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 441 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 220 mg/m³ 8 hours. TWA: 50 ppm 8 hours.</td>
</tr>
<tr>
<td>colophony</td>
<td>EH40/2005 WELs (United Kingdom (UK), 12/2011). Inhalation sensitiser. STEL: 0.15 mg/m³ 15 minutes. Form: Fume TWA: 0.05 mg/m³ 8 hours. Form: Fume</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 552 mg/m³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours. TWA: 441 mg/m³ 8 hours.</td>
</tr>
<tr>
<td>bis(1-hydroxy-1h-pyridine-2-thionato-o,s)copper</td>
<td>Arch Chemicals (Europe, 2002). TWA: 0.35 mg/m³ 8 hours.</td>
</tr>
<tr>
<td>1-methoxy-2-propanol</td>
<td>EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 560 mg/m³ 15 minutes. STEL: 150 ppm 15 minutes. TWA: 375 mg/m³ 8 hours. TWA: 100 ppm 8 hours.</td>
</tr>
</tbody>
</table>

Recommended monitoring procedures: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Derived no effect levels

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Type</th>
<th>Exposure</th>
<th>Value</th>
<th>Population</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>xylene</td>
<td>DNEL</td>
<td>Short term Inhalation</td>
<td>289 mg/m³</td>
<td>Workers</td>
<td>Systemic</td>
</tr>
<tr>
<td></td>
<td>DNEL</td>
<td>Short term Inhalation</td>
<td>289 mg/m³</td>
<td>Workers</td>
<td>Local</td>
</tr>
<tr>
<td></td>
<td>DNEL</td>
<td>Long term Dermal</td>
<td>180 mg/kg bw/day</td>
<td>Workers</td>
<td>Systemic</td>
</tr>
<tr>
<td></td>
<td>DNEL</td>
<td>Long term Inhalation</td>
<td>77 mg/m³</td>
<td>Workers</td>
<td>Systemic</td>
</tr>
<tr>
<td></td>
<td>DNEL</td>
<td>Long term Dermal</td>
<td>108 mg/kg bw/day</td>
<td>Consumers</td>
<td>Systemic</td>
</tr>
<tr>
<td></td>
<td>DNEL</td>
<td>Long term Inhalation</td>
<td>14.8 mg/m³</td>
<td>Consumers</td>
<td>Systemic</td>
</tr>
<tr>
<td></td>
<td>DNEL</td>
<td>Long term Oral</td>
<td>1.6 mg/kg bw/day</td>
<td>Consumers</td>
<td>Systemic</td>
</tr>
<tr>
<td></td>
<td>DNEL</td>
<td>Long term Dermal</td>
<td>25 mg/kg bw/day</td>
<td>Workers</td>
<td>Systemic</td>
</tr>
<tr>
<td></td>
<td>DNEL</td>
<td>Long term Inhalation</td>
<td>176 mg/m³</td>
<td>Workers</td>
<td>Systemic</td>
</tr>
<tr>
<td>colophony</td>
<td>DNEL</td>
<td>Long term Dermal</td>
<td>25 mg/kg bw/day</td>
<td>Workers</td>
<td>Systemic</td>
</tr>
<tr>
<td></td>
<td>DNEL</td>
<td>Long term Inhalation</td>
<td>176 mg/m³</td>
<td>Workers</td>
<td>Systemic</td>
</tr>
</tbody>
</table>

Date of issue: 26.10.2017
SECTION 8: Exposure controls/personal protection

### ethylbenzene
- **DNEL Long term Dermal**: 15 mg/kg bw/day
- **Consumers**: Systemic
- **DNEL Long term Inhalation**: 52 mg/m³
- **Consumers**: Systemic
- **DNEL Long term Oral**: 15 mg/kg bw/day
- **Consumers**: Systemic
- **DNEL Short term Inhalation**: 293 mg/m³
- **Workers**: Local
- **DNEL Long term Dermal**: 180 mg/kg bw/day
- **Workers**: Systemic
- **DNEL Long term Inhalation**: 77 mg/m³
- **Workers**: Systemic
- **DNEL Long term Inhalation**: 15 mg/m³
- **Consumers**: Systemic
- **DNEL Long term Oral**: 1.6 mg/kg bw/day
- **Consumers**: Systemic

### 1-methoxy-2-propanol
- **DNEL Short term Inhalation**: 553.5 mg/m³
- **Workers**: Local
- **DNEL Long term Dermal**: 50.6 mg/kg bw/day
- **Workers**: Systemic
- **DNEL Long term Inhalation**: 369 mg/m³
- **Workers**: Systemic
- **DNEL Long term Dermal**: 18.1 mg/kg bw/day
- **Consumers**: Systemic
- **DNEL Long term Inhalation**: 43.9 mg/m³
- **Consumers**: Systemic
- **DNEL Long term Oral**: 3.3 mg/kg bw/day
- **Consumers**: Systemic
- **DNEL Long term Dermal**: 83 mg/kg bw/day
- **Workers**: Systemic
- **DNEL Long term Inhalation**: 5 mg/m³
- **Workers**: Systemic
- **DNEL Long term Dermal**: 83 mg/kg bw/day
- **Consumers**: Systemic
- **DNEL Long term Inhalation**: 2.5 mg/m³
- **Consumers**: Systemic
- **DNEL Long term Oral**: 0.83 mg/kg bw/day
- **Consumers**: Systemic

### Predicted no effect concentrations

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Type</th>
<th>Compartment Detail</th>
<th>Value</th>
<th>Method Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>dicopper oxide</td>
<td>PNEC</td>
<td>Fresh water</td>
<td>7.8 µg/l</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>PNEC</td>
<td>Marine</td>
<td>5.2 µg/l</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>PNEC</td>
<td>Sewage Treatment Plant</td>
<td>230 µg/l</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>PNEC</td>
<td>Fresh water sediment</td>
<td>87 mg/kg dwt</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>PNEC</td>
<td>Marine water sediment</td>
<td>676 mg/kg dwt</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>PNEC</td>
<td>Soil</td>
<td>65 mg/kg dwt</td>
<td>-</td>
</tr>
<tr>
<td>xylene</td>
<td>PNEC</td>
<td>Fresh water</td>
<td>0.327 mg/l</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>PNEC</td>
<td>Marine</td>
<td>0.327 mg/l</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>PNEC</td>
<td>Sewage Treatment Plant</td>
<td>6.58 mg/l</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>PNEC</td>
<td>Fresh water sediment</td>
<td>12.46 mg/kg dwt</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>PNEC</td>
<td>Marine water sediment</td>
<td>12.46 mg/kg dwt</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>PNEC</td>
<td>Soil</td>
<td>2.31 mg/kg dwt</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>PNEC</td>
<td>Fresh water</td>
<td>0.0054 mg/l</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>PNEC</td>
<td>Marine</td>
<td>0.0054 mg/l</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>PNEC</td>
<td>Sewage Treatment Plant</td>
<td>1000 mg/l</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>PNEC</td>
<td>Fresh water sediment</td>
<td>0.02 mg/kg dwt</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>PNEC</td>
<td>Marine water sediment</td>
<td>0.002 mg/kg dwt</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>PNEC</td>
<td>Soil</td>
<td>0.0015 mg/kg dwt</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>PNEC</td>
<td>Fresh water</td>
<td>0.1 mg/l</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>PNEC</td>
<td>Marine</td>
<td>0.01 mg/l</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>PNEC</td>
<td>Sewage Treatment Plant</td>
<td>9.6 mg/l</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>PNEC</td>
<td>Fresh water sediment</td>
<td>13.7 mg/kg dwt</td>
<td>-</td>
</tr>
</tbody>
</table>

**dicopper oxide**
- PNEC Fresh water: 7.8 µg/l
- PNEC Marine: 5.2 µg/l
- PNEC Sewage Treatment Plant: 230 µg/l
- PNEC Fresh water sediment: 87 mg/kg dwt
- PNEC Marine water sediment: 676 mg/kg dwt
- PNEC Soil: 65 mg/kg dwt

**xylene**
- PNEC Fresh water: 0.327 mg/l
- PNEC Marine: 0.327 mg/l
- PNEC Sewage Treatment Plant: 6.58 mg/l
- PNEC Fresh water sediment: 12.46 mg/kg dwt
- PNEC Marine water sediment: 12.46 mg/kg dwt
- PNEC Soil: 2.31 mg/kg dwt
- PNEC Fresh water: 0.0054 mg/l
- PNEC Marine: 0.0054 mg/l
- PNEC Sewage Treatment Plant: 1000 mg/l
- PNEC Fresh water sediment: 0.02 mg/kg dwt
- PNEC Marine water sediment: 0.002 mg/kg dwt
- PNEC Soil: 0.0015 mg/kg dwt
- PNEC Fresh water: 0.1 mg/l
- PNEC Marine: 0.01 mg/l
- PNEC Sewage Treatment Plant: 9.6 mg/l
- PNEC Fresh water sediment: 13.7 mg/kg dwt

**colophony**
- PNEC Fresh water sediment: 12.46 mg/kg dwt
- PNEC Marine water sediment: 12.46 mg/kg dwt
- PNEC Soil: 2.31 mg/kg dwt
- PNEC Fresh water: 0.0054 mg/l
- PNEC Marine: 0.0054 mg/l
- PNEC Sewage Treatment Plant: 1000 mg/l
- PNEC Fresh water sediment: 0.02 mg/kg dwt
- PNEC Marine water sediment: 0.002 mg/kg dwt
- PNEC Soil: 0.0015 mg/kg dwt
- PNEC Fresh water: 0.1 mg/l
- PNEC Marine: 0.01 mg/l
- PNEC Sewage Treatment Plant: 9.6 mg/l
- PNEC Fresh water sediment: 13.7 mg/kg dwt

**ethylbenzene**
- PNEC Fresh water: 0.1 mg/l
- PNEC Marine: 0.01 mg/l
- PNEC Sewage Treatment Plant: 9.6 mg/l
- PNEC Fresh water sediment: 13.7 mg/kg dwt

**Date of issue**: 26.10.2017
SECTION 8: Exposure controls/personal protection

Hand protection

Safety eyewear complying to EN 166 should be used when a risk assessment indicates this is necessary to avoid exposure to chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Eye/face protection

Skin protection

Appropriate engineering controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

8.2 Exposure controls

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying to EN 166 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

Individual protection measures

Wear suitable gloves tested to EN374.
Not recommended, gloves(breakthrough time) < 1 hour: neoprene, butyl rubber, PVC
Recommended, gloves(breakthrough time) > 8 hours: fluor rubber, 4H, Teflon, nitrile rubber, polyvinyl alcohol (PVA)

For right choice of glove materials, with focus on chemical resistance and time of penetration, seek advice by the supplier of chemical resistant gloves. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

Date of issue: 26.10.2017
SECTION 8: Exposure controls/personal protection

**Body protection**: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

**Other skin protection**: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection**: If workers are exposed to concentrations above the exposure limit, they must use a respirator according to EN 140. Use respiratory mask with charcoal and dust filter when spraying this product, according to EN 14387 (as filter combination A2-P3). In confined spaces, use compressed-air or fresh-air respiratory equipment. When use of roller or brush, consider use of charcoalfilter.

**Environmental exposure controls**: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

**Appearance**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid.</td>
</tr>
<tr>
<td>Colour</td>
<td>Red.</td>
</tr>
<tr>
<td>Odour</td>
<td>Characteristic.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>Lowest known value: 120.17°C (248.3°F) (1-methoxy-2-propanol). Weighted average: 135.14°C (275.3°F)</td>
</tr>
<tr>
<td>Flash point</td>
<td>Closed cup: 27°C</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Highest known value: 0.84 (ethylbenzene) Weighted average: 0.79 compared with butyl acetate</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Burning time</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Burning rate</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>0.8 - 13.74%</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Highest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighted average: 0.98 kPa (7.35 mm Hg) (at 20°C)</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.66 (Air = 1)</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.67 to 1.68 g/cm³</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Insoluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Lowest known value: 270°C (518°F) (1-methoxy-2-propanol).</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Kinematic (40°C): &gt;0.205 cm²/s (&gt;20.5 mm²/s)</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not available.</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

9.2 Other information

No additional information.

Date of issue: 26.10.2017
SECTION 10: Stability and reactivity

10.1 Reactivity: No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability: The product is stable.

10.3 Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid: Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

10.5 Incompatible materials: Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.

10.6 Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains colophony, zineb. May produce an allergic reaction.

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>dicopper oxide</td>
<td>LC50 Inhalation Dusts and mists</td>
<td>Rat</td>
<td>3.34 mg/l</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>470 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>xylene</td>
<td>LC50 Inhalation Vapour</td>
<td>Rat</td>
<td>20 mg/l</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>4300 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>TDLo Dermal</td>
<td>Rabbit</td>
<td>4300 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>LC50 Inhalation Gas.</td>
<td>Rabbit</td>
<td>4000 ppm</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>&gt;5000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>zineb</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>3500 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>bis(1-hydroxy-1h-pyridine-2-thionato-o,s)copper</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>1850 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LC50 Inhalation Dusts and mists</td>
<td>Rat</td>
<td>70 mg/m³</td>
<td>4 hours</td>
</tr>
<tr>
<td>1-methoxy-2-propanol</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>1075 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>13 g/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>6600 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Acute toxicity estimates

<table>
<thead>
<tr>
<th>Route</th>
<th>ATE value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>1392.2 mg/kg</td>
</tr>
<tr>
<td>Dermal</td>
<td>7077.1 mg/kg</td>
</tr>
<tr>
<td>Inhalation (vapours)</td>
<td>53.08 mg/l</td>
</tr>
<tr>
<td>Inhalation (dusts and mists)</td>
<td>2.1 mg/l</td>
</tr>
</tbody>
</table>

Irritation/Corrosion

Date of issue: 26.10.2017
SECTION 11: Toxicological information

### Potential acute health effects

**Eye contact**: Causes serious eye damage.

**Inhalation**: Harmful if inhaled.

**Skin contact**: Causes skin irritation. May cause an allergic skin reaction.

**Ingestion**: Harmful if swallowed.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact**: Adverse symptoms may include the following:
- Pain
- Watering
- Redness

**Inhalation**: Adverse symptoms may include the following:
- Reduced foetal weight
- Increase in foetal deaths
- Skeletal malformations

**Skin contact**: Adverse symptoms may include the following:
- Pain or irritation
- Blistering may occur
- Reduced foetal weight
- Increase in foetal deaths
- Skeletal malformations

**Ingestion**: Adverse symptoms may include the following:
- Stomach pains
- Reduced foetal weight
- Increase in foetal deaths
- Skeletal malformations

### Potential chronic health effects

**General**: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity**: No known significant effects or critical hazards.

**Mutagenicity**: No known significant effects or critical hazards.

**Teratogenicity**: Suspected of damaging the unborn child.

**Developmental effects**: No known significant effects or critical hazards.

---

**Tables**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-methoxy-2-propanol</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>500 milligrams</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24 hours 500 milligrams</td>
<td></td>
</tr>
<tr>
<td>zinc oxide</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td></td>
</tr>
</tbody>
</table>

**Specific target organ toxicity (single exposure)**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>zineb</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Respiratory tract irritation Narcotic effects</td>
</tr>
<tr>
<td>1-methoxy-2-propanol</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td></td>
</tr>
</tbody>
</table>

**Specific target organ toxicity (repeated exposure)**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethylbenzene</td>
<td>Category 2</td>
<td>Not determined</td>
<td>hearing organs</td>
</tr>
</tbody>
</table>

**Aspiration hazard**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethylbenzene</td>
<td>ASPIRATION HAZARD - Category 1</td>
</tr>
</tbody>
</table>

---

**Date of issue**: 26.10.2017
SECTION 11: Toxicological information

Fertility effects: No known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>dicopper oxide</td>
<td>Acute LC50 0.075 mg/l Fresh water</td>
<td>Fish - Danio rerio</td>
<td>96 hours</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>Acute EC50 7.2 mg/l</td>
<td>Algae</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 2.93 mg/l</td>
<td>Daphnia</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 4.2 mg/l</td>
<td>Fish</td>
<td>96 hours</td>
</tr>
<tr>
<td>zineb</td>
<td>Acute EC50 0.38 mg/l Fresh water</td>
<td>Algae - Pseudokirchneriella</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 970 to 1800 μg/l Fresh water</td>
<td>subcapitata</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute LC50 0.225 mg/l</td>
<td>Fish</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 0.05 mg/l Fresh water</td>
<td>Algae - Chlorella vulgaris</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 0.022 mg/l</td>
<td>Daphnia</td>
<td>48 hours</td>
</tr>
<tr>
<td>bis(1-hydroxy-1h-pyridine-2-thionato-o,s)copper</td>
<td>Acute IC50 0.035 mg/l</td>
<td>Algae</td>
<td>120 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 0.0043 mg/l</td>
<td>Fish</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 1.1 ppm Fresh water</td>
<td>Fish - Oncorhynchus mykiss</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

Conclusion/Summary: Water polluting material. May be harmful to the environment if released in large quantities. This material is very toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

Conclusion/Summary: Not available.

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Aquatic half-life</th>
<th>Photolysis</th>
<th>Biodegradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>dicopper oxide</td>
<td>-</td>
<td>-</td>
<td>Not readily</td>
</tr>
<tr>
<td>xyylene</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
<tr>
<td>zinc oxide</td>
<td>-</td>
<td>-</td>
<td>Not readily</td>
</tr>
</tbody>
</table>

12.3 Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP&lt;sub&gt;ow&lt;/sub&gt;</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>xyylene</td>
<td>3.12</td>
<td>8.1 to 25.9</td>
<td>low</td>
</tr>
<tr>
<td>colophony</td>
<td>1.9 to 7.7</td>
<td>-</td>
<td>high</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>3.6</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>zineb</td>
<td>1.3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1-methoxy-2-propanol</td>
<td>&lt;1</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>zinc oxide</td>
<td>-</td>
<td>60960</td>
<td>high</td>
</tr>
</tbody>
</table>

12.4 Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>): Not available.

Mobility: Not available.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects: No known significant effects or critical hazards.

Date of issue: 26.10.2017
SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods
Do not allow to enter drains or watercourses. Material and/or container must be disposed of as hazardous waste.

European waste catalogue (EWC): 08 01 11* Waste paint and varnish containing organic solvents or other dangerous substances

SECTION 14: Transport information

Transport within user’s premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in accordance with ADR/RID, IMDG/IMO and ICAO/IATA and national regulation.

International transport regulations

14.1 UN number: 1263
14.2 UN proper shipping name: Paint. Marine pollutant (dicopper oxide, bis(1-hydroxy-1h-pyridine-2-thionato-o,s) copper)
14.3 Transport hazard class(es): 3

Marking: The environmental hazardous / marine pollutant mark is only applicable for packages containing more than 5 litres for liquids and 5 kg for solids.

14.4 Packing group: III
14.5 Environmental hazards: Yes.
14.6 Special precautions for user: Transport within user’s premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Additional information

ADR / RID: Tunnel restriction code: (D/E)
Hazard identification number: 30

IMDG: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

Emergency schedules (EmS): F-E, S-E

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code: Not available.

IMDG Code Segregation group: Not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)
Annex XIV - List of substances subject to authorisation
Substances of very high concern
None of the components are listed.

Date of issue: 26.10.2017
SECTION 15: Regulatory information

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles: Not applicable.

Other EU regulations

Europe inventory: At least one component is not listed.
Black List Chemicals: Not listed
Industrial emissions (integrated pollution prevention and control) - Air: Listed
Industrial emissions (integrated pollution prevention and control) - Water: Not listed

European inventory: At least one component is not listed.
Black List Chemicals: Not listed
Industrial emissions (integrated pollution prevention and control) - Air: Listed
Industrial emissions (integrated pollution prevention and control) - Water: Not listed

Product/ingredient name | Carcinogenic effects | Mutagenic effects | Developmental effects | Fertility effects
--- | --- | --- | --- | ---
zineb | - | - | Repr. 2, H361d (Unborn child) | -

Chemical Weapons Convention List Schedule I Chemicals: Not listed
Chemical Weapons Convention List Schedule II Chemicals: Not listed
Chemical Weapons Convention List Schedule III Chemicals: Not listed

15.2 Chemical safety assessment: Not applicable.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms:
ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flam. Liq. 3, H226</td>
<td>On basis of test data</td>
</tr>
<tr>
<td>Acute Tox. 4, H302</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Acute Tox. 4, H332</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Skin Irrit. 2, H315</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Eye Dam. 1, H318</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Skin Sens. 1, H317</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Repr. 2, H361d (Unborn child)</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Aquatic Acute 1, H400</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Aquatic Chronic 1, H410</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

Date of issue: 26.10.2017
SECTION 16: Other information

Full text of abbreviated H statements:

| H225   | Highly flammable liquid and vapour.           |
| H226   | Flammable liquid and vapour.                 |
| H228   | Flammable solid.                             |
| H302   | Harmful if swallowed.                       |
| H304   | May be fatal if swallowed and enters airways.|
| H312   | Harmful in contact with skin.                |
| H315   | Causes skin irritation.                      |
| H317   | May cause an allergic skin reaction.         |
| H318   | Causes serious eye damage.                   |
| H319   | Causes serious eye irritation.               |
| H330   | Fatal if inhaled.                            |
| H332   | Harmful if inhaled.                          |
| H335   | May cause respiratory irritation.            |
| H336   | May cause drowsiness or dizziness.           |
| H361d  | Suspected of damaging the unborn child.      |
| H373   | May cause damage to organs through prolonged or repeated exposure. |
| H400   | Very toxic to aquatic life.                  |
| H410   | Very toxic to aquatic life with long lasting effects. |

Full text of classifications [CLP/GHS]

- Acute Tox. 2, H330: ACUTE TOXICITY (inhalation) - Category 2
- Acute Tox. 4, H302: ACUTE TOXICITY (oral) - Category 4
- Acute Tox. 4, H312: ACUTE TOXICITY (dermal) - Category 4
- Acute Tox. 4, H332: ACUTE TOXICITY (inhalation) - Category 4
- Aquatic Acute 1, H400: ACUTE AQUATIC HAZARD - Category 1
- Aquatic Chronic 1, H410: LONG-TERM AQUATIC HAZARD - Category 1
- Asp. Tox. 1, H304: ASPIRATION HAZARD - Category 1
- Eye Dam. 1, H318: SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
- Eye Irrit. 2, H319: SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
- Flam. Liq. 2, H225: FLAMMABLE LIQUIDS - Category 2
- Flam. Liq. 3, H226: FLAMMABLE LIQUIDS - Category 3
- Flam. Sol. 1, H228: FLAMMABLE SOLIDS - Category 1
- Repr. 2, H361d (Unborn child): TOXIC TO REPRODUCTION (Unborn child) - Category 2
- Skin Irrit. 2, H315: SKIN CORROSION/IRRITATION - Category 2
- Skin Sens. 1, H317: SKIN SENSITIZATION - Category 1
- STOT RE 2, H373 (hearing organs): SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (hearing organs) - Category 2
- STOT SE 3, H335: SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
- STOT SE 3, H336: SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

Date of printing: 26.10.2017
Date of issue/ Date of revision: 26.10.2017
Date of previous issue: 16.03.2017
Version: 8

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