

# SAFETY DATA SHEET



## SeaQuantum X200 - 2

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

#### 1.1 Product identifier

**Product name** : SeaQuantum X200 - 2  
**Product code** : 11740  
**Product description** : Paint.  
**Product type** : Liquid.  
**Other means of identification** : Not available.

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

Use in coatings - Professional use

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

Jotun A/S  
 P.O. Box 2021  
 3202 Sandefjord Norway

Tel: + 47 33 45 70 00  
 Fax: +47 33 45 72 42  
 sdsjotun@jotun.no

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

Tel: +44 1724 400 000  
 Fax: +44 1724 400 100  
 csd.flixborough@jotun.co.uk

#### 1.4 Emergency telephone number

##### National advisory body/Poison Centre

**Telephone number** : Contact NHS Direct; phone 0845 4647 or 111. Open 24/7.

##### Supplier

**Telephone number** : +47 33 45 70 00 Jotun Norway (head office)

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

##### Classification according to UK 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  
 Aquatic Acute 1, H400  
 Aquatic Chronic 1, H410

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

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

See Section 11 for more detailed information on health effects and symptoms.

#### 2.2 Label elements

**SECTION 2: Hazards identification****Hazard pictograms**

:

**Signal word**

: Danger.

**Hazard statements**

: H226 - Flammable liquid and vapour.  
 H302 + H332 - Harmful if swallowed or if inhaled.  
 H315 - Causes skin irritation.  
 H317 - May cause an allergic skin reaction.  
 H318 - Causes serious eye damage.  
 H410 - Very toxic to aquatic life with long lasting effects.

**Precautionary statements****General**

: Not applicable.

**Prevention**

: P280 - Wear protective gloves. Wear eye or face protection.  
 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P273 - Avoid release to the environment.  
 P261 - Avoid breathing vapour.  
 P270 - Do not eat, drink or smoke when using this product.

**Response**

: P391 - Collect spillage.  
 P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell.  
 P362 + P364 - Take off contaminated clothing and wash it before reuse.  
 P302 + P352 - IF ON SKIN: Wash with plenty of water.  
 P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention.  
 P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 Immediately call a POISON CENTER or doctor.

**Storage**

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

**Disposal**

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

**Supplemental label elements**

: Not applicable.

**Additional information**

: Antifouling. Active substances: dicopper oxide (CAS 1317-39-1) 49.8 % w/w, copper pyrithione (CAS 14915-37-8) 1.6 % w/w. Read Technical Data Sheet and Safety Data Sheet before use. Do not reuse empty containers. For professional use only.

**Additional information**

: HSE No. 9499. 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 + IMO MEPC.331(76).

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

: Not applicable.

**Special packaging requirements****Containers to be fitted with child-resistant fastenings**

: Not applicable.

**Tactile warning of danger**

: Not applicable.

SECTION 2: Hazards identification

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

| Product/ingredient name                                               | Identifiers                                                                            | %   | Classification                                                                                                                                                                 | Type    |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| copper oxide                                                          | REACH #:<br>01-2119513794-36<br>EC: 215-270-7<br>CAS: 1317-39-1<br>Index: 029-002-00-X | ≤50 | Acute Tox. 4, H302<br>Acute Tox. 4, H332<br>Eye Dam. 1, H318<br>Aquatic Acute 1, H400 (M=100)<br>Aquatic Chronic 1, H410 (M=10)                                                | [1] [2] |
| xylene                                                                | REACH #:<br>01-2119488216-32<br>EC: 215-535-7<br>CAS: 1330-20-7<br>Index: 601-022-00-9 | ≤16 | Flam. Liq. 3, H226<br>Acute Tox. 4, H312<br>Acute Tox. 4, H332<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>STOT SE 3, H335<br>Asp. Tox. 1, H304<br>Aquatic Chronic 3, H412 | [1] [2] |
| ethylbenzene                                                          | REACH #:<br>01-2119489370-35<br>EC: 202-849-4<br>CAS: 100-41-4<br>Index: 601-023-00-4  | ≤5  | Flam. Liq. 2, H225<br>Acute Tox. 4, H332<br>STOT RE 2, H373 (hearing organs)<br>Asp. Tox. 1, H304<br>Aquatic Chronic 3, H412                                                   | [1] [2] |
| zinc oxide                                                            | REACH #:<br>01-2119463881-32<br>EC: 215-222-5<br>CAS: 1314-13-2<br>Index: 030-013-00-7 | ≤5  | Aquatic Acute 1, H400 (M=1)<br>Aquatic Chronic 1, H410 (M=1)                                                                                                                   | [1]     |
| talc (non-asbestos form)                                              | EC: 238-877-9<br>CAS: 14807-96-6                                                       | ≤5  | Not classified.                                                                                                                                                                | [2]     |
| colophony                                                             | REACH #:<br>01-2119480418-32<br>EC: 232-475-7<br>CAS: 8050-09-7<br>Index: 650-015-00-7 | ≤3  | Skin Sens. 1, H317                                                                                                                                                             | [1] [2] |
| hydrocarbons, C9, aromatics                                           | REACH #:<br>01-2119455851-35<br>EC: 918-668-5<br>CAS: 128601-23-0                      | ≤3  | Flam. Liq. 3, H226<br>STOT SE 3, H335<br>STOT SE 3, H336<br>Asp. Tox. 1, H304<br>Aquatic Chronic 2, H411<br>EUH066                                                             | [1]     |
| diiron trioxide                                                       | REACH #:<br>01-2119457614-35<br>EC: 215-168-2<br>CAS: 1309-37-1                        | ≤3  | Not classified.                                                                                                                                                                | [2]     |
| Bis(1-hydroxy-1H-pyridine-2-thionato- O,S)copper (Copper pyrrithione) | EC: 238-984-0<br>CAS: 14915-37-8                                                       | ≤3  | Acute Tox. 4, H302<br>Acute Tox. 2, H330<br>Eye Dam. 1, H318<br>Aquatic Acute 1, H400                                                                                          | [1] [2] |

**SECTION 3: Composition/information on ingredients**

|  |  |  |                                                                                                                                          |  |
|--|--|--|------------------------------------------------------------------------------------------------------------------------------------------|--|
|  |  |  | (M=100)<br>Aquatic Chronic 1,<br>H410 (M=100)<br><b>See Section 16 for<br/>the full text of the H<br/>statements declared<br/>above.</b> |  |
|--|--|--|------------------------------------------------------------------------------------------------------------------------------------------|--|

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, vPvBs or Substances of equivalent concern, 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

Occupational exposure limits, if available, are listed in Section 8.

**SECTION 4: First aid measures****4.1 Description of first aid measures**

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.
- Skin contact** : Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- 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**Over-exposure signs/symptoms

**SECTION 4: First aid measures**

- Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur
- Ingestion** : Adverse symptoms may include the following:  
stomach pains

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

- 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.

See toxicological information (Section 11)

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

- Suitable extinguishing media** : Recommended: alcohol-resistant foam, CO<sub>2</sub>, 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. Runoff to sewer may create fire or explosion hazard.  
In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. 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 combustion 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.

**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.

## SECTION 6: Accidental release measures

**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.

### 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 (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

**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.

SECTION 7: Handling and storage

- Protective measures

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Liquid paint and washing water with paint residues must not be emptied into drains or watercourses. It must be delivered to an approved local environmental protection station.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Seveso Directive - Reporting thresholds

Danger criteria

| Category  | Notification and MAPP threshold | Safety report threshold  |
|-----------|---------------------------------|--------------------------|
| P5c<br>E1 | 5000 tonne<br>100 tonne         | 50000 tonne<br>200 tonne |

See Technical Data Sheet / packaging for further information.

7.3 Specific end use(s)

- Recommendations

: Not available.
- Industrial sector specific solutions

: Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

| Product/ingredient name                                                                            | Exposure limit values                                                                                                                                                                                                           |
|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  dicopper oxide | <b>EH40/2005 WELs (United Kingdom (UK), 1/2020). [Copper and compounds]</b><br>STEL: 2 mg/m³, (as Cu) 15 minutes. Form: Dusts and Mists<br>TWA: 1 mg/m³, (as Cu) 8 hours. Form: Dusts and Mists                                 |
| xylene                                                                                             | <b>EH40/2005 WELs (United Kingdom (UK), 1/2020). [xylene, o-,m-, p- or mixed isomers] Absorbed through skin.</b><br>STEL: 441 mg/m³ 15 minutes.<br>STEL: 100 ppm 15 minutes.<br>TWA: 220 mg/m³ 8 hours.<br>TWA: 50 ppm 8 hours. |
| ethylbenzene                                                                                       | <b>EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.</b><br>STEL: 552 mg/m³ 15 minutes.                                                                                                                      |

|                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>talca (non-asbestos form)</p>                                                | <p>STEL: 125 ppm 15 minutes.<br/>TWA: 100 ppm 8 hours.<br/>TWA: 441 mg/m<sup>3</sup> 8 hours.</p> <p><b>EH40/2005 WELs (United Kingdom (UK), 1/2020).</b></p> <p>TWA: 1 mg/m<sup>3</sup> 8 hours. Form: respirable dust</p>                                                                                                                                                                                                                                                                              |
| <p>colophony</p>                                                                | <p><b>EH40/2005 WELs (United Kingdom (UK), 1/2020). Inhalation sensitiser.</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <p>diiron trioxide</p>                                                          | <p>STEL: 0.15 mg/m<sup>3</sup> 15 minutes. Form: Fume<br/>TWA: 0.05 mg/m<sup>3</sup> 8 hours. Form: Fume</p> <p><b>EH40/2005 WELs (United Kingdom (UK), 1/2020). [Iron oxide]</b></p> <p>STEL: 10 mg/m<sup>3</sup>, (as Fe) 15 minutes. Form: Fume<br/>TWA: 5 mg/m<sup>3</sup>, (as Fe) 8 hours. Form: Fume</p> <p><b>EH40/2005 WELs (United Kingdom (UK), 1/2020). [rouge]</b></p> <p>TWA: 4 mg/m<sup>3</sup> 8 hours. Form: respirable<br/>TWA: 10 mg/m<sup>3</sup> 8 hours. Form: total inhalable</p> |
| <p>Bis(1-hydroxy-1H-pyridine-2-thionato- O,S)<br/>copper (Copper pyrrhione)</p> | <p><b>EH40/2005 WELs (United Kingdom (UK), 1/2020). [Copper and compounds]</b></p> <p>STEL: 2 mg/m<sup>3</sup>, (as Cu) 15 minutes. Form: Dusts and Mists<br/>TWA: 1 mg/m<sup>3</sup>, (as Cu) 8 hours. Form: Dusts and Mists</p>                                                                                                                                                                                                                                                                        |

| Product/ingredient name | Exposure indices                                                                                                                                                                    |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Xylene                  | EH40/2005 BMGVs (United Kingdom (UK), 8/2018) [Xylene, o-, m-, p- or mixed isomers]<br>BGV: 650 mmol/mol creatinine, methyl hippuric acid [in urine].<br>Sampling time: post shift. |

## DNELs/DMELs

| Product/ingredient name                                                                                                          | Type | Exposure              | Value              | Population         | Effects  |
|----------------------------------------------------------------------------------------------------------------------------------|------|-----------------------|--------------------|--------------------|----------|
|  dicopper oxide<br><br><br><br><br><br>xylene | DNEL | Long term Inhalation  | 1 mg/m³            | Workers            | Local    |
|                                                                                                                                  | DNEL | Long term Inhalation  | 1 mg/m³            | Workers            | Systemic |
|                                                                                                                                  | DNEL | Long term Dermal      | 137 mg/kg bw/day   | Workers            | Systemic |
|                                                                                                                                  | DNEL | Long term Oral        | 0.041 mg/kg bw/day | General population | Systemic |
|                                                                                                                                  | DNEL | Short term Oral       | 0.082 mg/kg bw/day | General population | Systemic |
|                                                                                                                                  | DNEL | Long term Oral        | 5 mg/kg bw/day     | General population | Systemic |
|                                                                                                                                  | DNEL | Long term Inhalation  | 65.3 mg/m³         | General population | Local    |
|                                                                                                                                  | DNEL | Long term Inhalation  | 65.3 mg/m³         | General population | Systemic |
|                                                                                                                                  | DNEL | Long term Dermal      | 125 mg/kg bw/day   | General population | Systemic |
|                                                                                                                                  | DNEL | Long term Dermal      | 212 mg/kg bw/day   | Workers            | Systemic |
|                                                                                                                                  | DNEL | Long term Inhalation  | 221 mg/m³          | Workers            | Local    |
|                                                                                                                                  | DNEL | Long term Inhalation  | 221 mg/m³          | Workers            | Systemic |
|                                                                                                                                  | DNEL | Short term Inhalation | 260 mg/m³          | General population | Local    |
|                                                                                                                                  | DNEL | Short term Inhalation | 260 mg/m³          | General population | Systemic |
|                                                                                                                                  | DNEL | Short term Inhalation | 442 mg/m³          | Workers            | Local    |

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

|                          |      |                       |                         |                                |          |
|--------------------------|------|-----------------------|-------------------------|--------------------------------|----------|
| ethylbenzene             | DNEL | Short term Inhalation | 442 mg/m <sup>3</sup>   | Workers                        | Systemic |
|                          | DMEL | Long term Inhalation  | 442 mg/m <sup>3</sup>   | Workers                        | Local    |
|                          | DMEL | Short term Inhalation | 884 mg/m <sup>3</sup>   | Workers                        | Systemic |
|                          | DNEL | Long term Oral        | 1.6 mg/kg bw/day        | General population             | Systemic |
|                          | DNEL | Long term Inhalation  | 15 mg/m <sup>3</sup>    | General population             | Systemic |
|                          | DNEL | Long term Inhalation  | 77 mg/m <sup>3</sup>    | Workers                        | Systemic |
|                          | DNEL | Long term Dermal      | 180 mg/kg bw/day        | Workers                        | Systemic |
|                          | DNEL | Short term Inhalation | 293 mg/m <sup>3</sup>   | Workers                        | Local    |
| zinc oxide               | DNEL | Long term Dermal      | 83 mg/kg bw/day         | Workers                        | Systemic |
|                          | DNEL | Long term Inhalation  | 5 mg/m <sup>3</sup>     | Workers                        | Systemic |
|                          | DNEL | Long term Dermal      | 83 mg/kg bw/day         | General population [Consumers] | Systemic |
|                          | DNEL | Long term Inhalation  | 2.5 mg/m <sup>3</sup>   | General population [Consumers] | Systemic |
|                          | DNEL | Long term Oral        | 0.83 mg/kg bw/day       | General population [Consumers] | Systemic |
|                          | DNEL | Short term Inhalation | 1.08 mg/m <sup>3</sup>  | General population             | Systemic |
| talc (non-asbestos form) | DNEL | Long term Inhalation  | 1.08 mg/m <sup>3</sup>  | General population             | Systemic |
|                          | DNEL | Short term Inhalation | 1.8 mg/m <sup>3</sup>   | General population             | Local    |
|                          | DNEL | Long term Inhalation  | 1.8 mg/m <sup>3</sup>   | General population             | Local    |
|                          | DNEL | Short term Inhalation | 2.16 mg/m <sup>3</sup>  | Workers                        | Systemic |
|                          | DNEL | Long term Inhalation  | 2.16 mg/m <sup>3</sup>  | Workers                        | Systemic |
|                          | DNEL | Long term Dermal      | 2.27 mg/cm <sup>2</sup> | General population             | Local    |
|                          | DNEL | Short term Inhalation | 3.6 mg/m <sup>3</sup>   | Workers                        | Local    |
|                          | DNEL | Long term Inhalation  | 3.6 mg/m <sup>3</sup>   | Workers                        | Local    |
|                          | DNEL | Long term Dermal      | 4.54 mg/cm <sup>2</sup> | Workers                        | Local    |
|                          | DNEL | Long term Dermal      | 21.6 mg/kg bw/day       | General population             | Systemic |
|                          | DNEL | Long term Dermal      | 43.2 mg/kg bw/day       | Workers                        | Systemic |
|                          | DNEL | Short term Oral       | 160 mg/kg bw/day        | General population             | Systemic |
|                          | DNEL | Long term Oral        | 160 mg/kg bw/day        | General population             | Systemic |
|                          | DNEL | Long term Dermal      | 25 mg/kg bw/day         | Workers                        | Systemic |
|                          | DNEL | Long term Inhalation  | 176 mg/m <sup>3</sup>   | Workers                        | Systemic |
|                          | DNEL | Long term Dermal      | 15 mg/kg bw/day         | General population [Consumers] | Systemic |
| colophony                |      |                       |                         |                                |          |
|                          |      |                       |                         |                                |          |

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

|                             |      |                       |                           |                                |          |
|-----------------------------|------|-----------------------|---------------------------|--------------------------------|----------|
| hydrocarbons, C9, aromatics | DNEL | Long term Inhalation  | 52 mg/m <sup>3</sup>      | General population [Consumers] | Systemic |
|                             | DNEL | Long term Oral        | 15 mg/kg bw/day           | General population [Consumers] | Systemic |
|                             | DNEL | Long term Dermal      | 12.5 mg/kg bw/day         | Workers                        | Systemic |
|                             | DNEL | Long term Inhalation  | 151 mg/m <sup>3</sup>     | Workers                        | Systemic |
|                             | DNEL | Long term Dermal      | 7.5 mg/kg bw/day          | General population [Consumers] | Systemic |
|                             | DNEL | Long term Inhalation  | 32 mg/m <sup>3</sup>      | General population [Consumers] | Systemic |
|                             | DNEL | Long term Oral        | 7.5 mg/kg bw/day          | General population [Consumers] | Systemic |
|                             | DNEL | Long term Inhalation  | 0.41 mg/m <sup>3</sup>    | General population             | Systemic |
|                             | DNEL | Long term Inhalation  | 1.9 mg/m <sup>3</sup>     | Workers                        | Systemic |
|                             | DNEL | Long term Inhalation  | 178.57 mg/m <sup>3</sup>  | General population             | Local    |
|                             | DNEL | Short term Inhalation | 640 mg/m <sup>3</sup>     | General population             | Local    |
|                             | DNEL | Long term Inhalation  | 837.5 mg/m <sup>3</sup>   | Workers                        | Local    |
|                             | DNEL | Short term Inhalation | 1066.67 mg/m <sup>3</sup> | Workers                        | Local    |
|                             | DNEL | Short term Inhalation | 1152 mg/m <sup>3</sup>    | General population             | Systemic |
|                             | DNEL | Short term Inhalation | 1286.4 mg/m <sup>3</sup>  | Workers                        | Systemic |

**PNECs**

| Product/ingredient name | Compartment Detail     | Value           | Method Detail |
|-------------------------|------------------------|-----------------|---------------|
| copper oxide            | Fresh water            | 7.8 µg/l        | -             |
|                         | Marine                 | 5.2 µg/l        | -             |
|                         | Sewage Treatment Plant | 230 µg/l        | -             |
| xylene                  | Fresh water sediment   | 87 mg/kg dwt    | -             |
|                         | Marine water sediment  | 676 mg/kg dwt   | -             |
|                         | Soil                   | 65 mg/kg dwt    | -             |
|                         | Fresh water            | 0.327 mg/l      | -             |
|                         | Marine                 | 0.327 mg/l      | -             |
|                         | Sewage Treatment Plant | 6.58 mg/l       | -             |
| ethylbenzene            | Fresh water sediment   | 12.46 mg/kg dwt | -             |
|                         | Marine water sediment  | 12.46 mg/kg dwt | -             |
|                         | Soil                   | 2.31 mg/kg dwt  | -             |
|                         | Fresh water            | 0.1 mg/l        | -             |
|                         | Marine                 | 0.01 mg/l       | -             |
|                         | Sewage Treatment Plant | 9.6 mg/l        | -             |
| zinc oxide              | Fresh water sediment   | 13.7 mg/kg dwt  | -             |
|                         | Soil                   | 2.68 mg/kg dwt  | -             |
|                         | Secondary Poisoning    | 20 mg/kg        | -             |
|                         | Fresh water            | 20.6 µg/l       | -             |
|                         | Marine                 | 6.1 µg/l        | -             |
|                         | Sewage Treatment Plant | 52 µg/l         | -             |
|                         | Fresh water sediment   | 117.8 mg/kg dwt | -             |

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

|           |                        |                 |   |
|-----------|------------------------|-----------------|---|
| colophony | Marine water sediment  | 56.5 mg/kg dw   | - |
|           | Soil                   | 35.6 mg/kg dw   | - |
|           | Fresh water            | 0.0054 mg/l     | - |
|           | Marine                 | 0.00054 mg/l    | - |
|           | Sewage Treatment Plant | 1000 mg/l       | - |
|           | Fresh water sediment   | 0.02 mg/kg dw   | - |
|           | Marine water sediment  | 0.002 mg/kg dw  | - |
|           | Soil                   | 0.0015 mg/kg dw | - |
|           |                        |                 |   |

**8.2 Exposure controls**

**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.

**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****Hand 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.

**Gloves**

Wear suitable gloves tested to EN 374.

Not recommended, gloves(breakthrough time) < 1 hour: neoprene (> 0.35 mm), butyl rubber (> 0.4 mm), PVC (> 0.5 mm)

Recommended, gloves(breakthrough time) > 8 hours: nitrile rubber (> 0.75 mm), 4H/Silver Shield® (> 0.07 mm), Teflon (> 0.35 mm), polyvinyl alcohol (PVA) (> 0.3 mm)

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.

**Body protection** : Use chemical-resistant protective suit / disposable overall.

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.

SECTION 8: Exposure controls/personal protection

- 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-P2). In confined spaces, use compressed-air or fresh-air respiratory equipment. When use of roller or brush, consider use of charcoalfilter.
- Environmental exposure controls : Do not allow to enter drains or watercourses.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

- Physical state : Liquid.
- Colour : Red
- Odour : Characteristic.
- Odour threshold : Not applicable.
- Melting point/freezing point : Not applicable.
- Initial boiling point and boiling range : Lowest known value: 136.1°C (277°F) (ethylbenzene). Weighted average: 140.91°C (285.6°F)
- Flammability : Not applicable.
- Upper/lower flammability or explosive limits :  Greatest known range: Lower: 1.4% Upper: 7.6% (hydrocarbons, C9, aromatics)
- Flash point : Closed cup: 25°C (77°F)
- Auto-ignition temperature : Lowest known value: 280 to 470°C (536 to 878°F) (hydrocarbons, C9, aromatics).
- Decomposition temperature : Not available.
- pH : Not applicable.
- Viscosity : Kinematic (40°C): >20.5 mm²/s
- Solubility(ies) :

| Media      | Result      |
|------------|-------------|
| cold water | Not soluble |
| hot water  | Not soluble |

- Partition coefficient: n-octanol/ water : Not available.
- Vapour pressure : Highest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighted average: 0.89 kPa (6.68 mm Hg) (at 20°C)
- Evaporation rate : Highest known value: 0.84 (ethylbenzene) Weighted average: 0.79compared with butyl acetate
- Density : 1.936 g/cm³
- Vapour density : Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.7 (Air = 1)
- Explosive properties : Not available.
- Oxidising properties : Not available.
- Particle characteristics
- Median particle size : Not applicable.

9.2 Other information

No additional information.

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

: Stable under recommended storage and handling conditions (see Section 7).
- 10.3 Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4 Conditions to avoid

: When exposed to high temperatures may produce hazardous decomposition products.
- 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

: Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

| Product/ingredient name                                              | Result                          | Species    | Dose        | Exposure |
|----------------------------------------------------------------------|---------------------------------|------------|-------------|----------|
| dicopper oxide                                                       | LC50 Inhalation Dusts and mists | Rat        | 3.34 mg/l   | 4 hours  |
|                                                                      | LD50 Oral                       | Rat        | 1340 mg/kg  | -        |
| xylene                                                               | LC50 Inhalation Vapour          | Rat        | 11 mg/l     | 4 hours  |
|                                                                      | LD50 Oral                       | Rat        | 4300 mg/kg  | -        |
| ethylbenzene                                                         | TDLo Dermal                     | Rabbit     | 4300 mg/kg  | -        |
|                                                                      | LC50 Inhalation Vapour          | Rat - Male | 11 mg/l     | 4 hours  |
|                                                                      | LD50 Dermal                     | Rabbit     | >5000 mg/kg | -        |
|                                                                      | LD50 Oral                       | Rat        | 3500 mg/kg  | -        |
| Bis(1-hydroxy-1H-pyridine-2-thionato- O,S)copper (Copper pyrithione) | LC50 Inhalation Dusts and mists | Rat        | 70 mg/m³    | 4 hours  |
|                                                                      | LD50 Dermal                     | Rabbit     | 300 mg/kg   | -        |
|                                                                      | LD50 Oral                       | Rat        | 200 mg/kg   | -        |

Acute toxicity estimates

| Product/ingredient name                                              | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapours) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|----------------------------------------------------------------------|--------------|----------------|--------------------------|-----------------------------|-------------------------------------|
| SeaQuantum X200 - 2                                                  | 989.1        | 7871.8         | N/A                      | 59.0                        | 2.7                                 |
| dicopper oxide                                                       | 500          | N/A            | N/A                      | N/A                         | 3.34                                |
| xylene                                                               | 4300         | 1100           | N/A                      | 11                          | N/A                                 |
| ethylbenzene                                                         | 3500         | N/A            | N/A                      | 11                          | N/A                                 |
| Bis(1-hydroxy-1H-pyridine-2-thionato- O,S)copper (Copper pyrithione) | 1075         | N/A            | N/A                      | N/A                         | 0.07                                |

Irritation/Corrosion

| Product/ingredient name                                              | Result                             | Species                      | Score | Exposure               | Observation |
|----------------------------------------------------------------------|------------------------------------|------------------------------|-------|------------------------|-------------|
| dicopper oxide                                                       | Eyes - Cornea opacity              | Rabbit                       | -     | 72 hours               | -           |
|                                                                      | Eyes - Redness of the conjunctivae | Rabbit                       | -     | 48 hours               | -           |
| xylene                                                               | Eyes - Mild irritant               | Rabbit                       | -     | 87 milligrams          | -           |
|                                                                      | Skin - Mild irritant               | Rat                          | -     | 8 hours 60 microliters | -           |
| zinc oxide                                                           | Eyes - Mild irritant               | Rabbit                       | -     | 24 hours 500 mg        | -           |
|                                                                      | Skin - Mild irritant               | Rabbit                       | -     | 24 hours 500 mg        | -           |
| Bis(1-hydroxy-1H-pyridine-2-thionato- O,S)copper (Copper pyrithione) | Eyes - Severe irritant             | Mammal - species unspecified | -     | -                      | -           |
|                                                                      | Skin - Irritant                    | Mammal - species             | -     | -                      | -           |

SECTION 11: Toxicological information

|  |  |             |  |  |  |
|--|--|-------------|--|--|--|
|  |  | unspecified |  |  |  |
|--|--|-------------|--|--|--|

Sensitisation

| Product/ingredient name                                              | Route of exposure | Species                      | Result          |
|----------------------------------------------------------------------|-------------------|------------------------------|-----------------|
| Colophony                                                            | skin              | Mammal - species unspecified | Sensitising     |
| Bis(1-hydroxy-1H-pyridine-2-thionato- O,S)copper (Copper pyrithione) | skin              | Guinea pig                   | Not sensitizing |

Mutagenicity

| Product/ingredient name                                              | Test     | Experiment                                       | Result   |
|----------------------------------------------------------------------|----------|--------------------------------------------------|----------|
| Bis(1-hydroxy-1H-pyridine-2-thionato- O,S)copper (Copper pyrithione) | OECD 474 | Experiment: In vivo<br>Subject: Mammalian-Animal | Negative |

No known significant effects or critical hazards.

Carcinogenicity

No known significant effects or critical hazards.

Reproductive toxicity

| Product/ingredient name                                              | Maternal toxicity | Fertility | Developmental toxin | Species                      | Dose                         | Exposure |
|----------------------------------------------------------------------|-------------------|-----------|---------------------|------------------------------|------------------------------|----------|
| Bis(1-hydroxy-1H-pyridine-2-thionato- O,S)copper (Copper pyrithione) | -                 | -         | Positive            | Mammal - species unspecified | Route of exposure unreported | -        |

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Teratogenicity

No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

| Product/ingredient name     | Category   | Route of exposure | Target organs                |
|-----------------------------|------------|-------------------|------------------------------|
| xylylene                    | Category 3 | -                 | Respiratory tract irritation |
| hydrocarbons, C9, aromatics | Category 3 | -                 | Respiratory tract irritation |
|                             | Category 3 |                   | Narcotic effects             |

Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Category   | Route of exposure | Target organs  |
|-------------------------|------------|-------------------|----------------|
| ethylbenzene            | Category 2 | -                 | hearing organs |

Aspiration hazard

| Product/ingredient name     | Result                         |
|-----------------------------|--------------------------------|
| xylylene                    | ASPIRATION HAZARD - Category 1 |
| ethylbenzene                | ASPIRATION HAZARD - Category 1 |
| hydrocarbons, C9, aromatics | ASPIRATION HAZARD - Category 1 |

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

SECTION 11: Toxicological information

|                   |                                                                                                        |
|-------------------|--------------------------------------------------------------------------------------------------------|
| Eye contact       | : Adverse symptoms may include the following:<br>pain<br>watering<br>redness                           |
| Inhalation        | : No specific data.                                                                                    |
| Skin contact      | : Adverse symptoms may include the following:<br>pain or irritation<br>redness<br>blistering may occur |
| Ingestion         | : Adverse symptoms may include the following:<br>stomach pains                                         |
| General           | : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.  |
| Other information | : None identified.                                                                                     |

SECTION 12: Ecological information

|                                                                                                                                                                                                        |                                    |                                                                                  |           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|----------------------------------------------------------------------------------|-----------|
| 12.1 Toxicity                                                                                                                                                                                          |                                    |                                                                                  |           |
| There are no data available on the mixture itself.<br>Do not allow to enter drains or watercourses.                                                                                                    |                                    |                                                                                  |           |
| The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details. |                                    |                                                                                  |           |
| Product/ingredient name                                                                                                                                                                                | Result                             | Species                                                                          | Exposure  |
| copper oxide                                                                                                                                                                                           | EC50 0.51 mg/l                     | Daphnia                                                                          | 48 hours  |
|                                                                                                                                                                                                        | LC50 >0.173 mg/l                   | Fish - Cyprinodon variegatus                                                     | 96 hours  |
| xylene                                                                                                                                                                                                 | Acute LC50 0.075 mg/l Fresh water  | Fish - Zebra danio - Danio rerio                                                 | 96 hours  |
|                                                                                                                                                                                                        | Chronic NOEC 0.001 mg/l            | Algae                                                                            | -         |
| ethylbenzene                                                                                                                                                                                           | Chronic NOEC 0.0052 mg/l           | Algae                                                                            | -         |
|                                                                                                                                                                                                        | Acute LC50 8500 µg/l Marine water  | Crustaceans - Daggerblade grass shrimp - Palaemonetes pugio                      | 48 hours  |
| zinc oxide                                                                                                                                                                                             | Acute LC50 13400 µg/l Fresh water  | Fish - Fathead minnow - Pimephales promelas                                      | 96 hours  |
|                                                                                                                                                                                                        | Acute EC50 7700 µg/l Marine water  | Algae - Diatom - Skeletonema costatum                                            | 96 hours  |
| hydrocarbons, C9, aromatics                                                                                                                                                                            | Acute EC50 2.93 mg/l               | Daphnia                                                                          | 48 hours  |
|                                                                                                                                                                                                        | Acute LC50 4.2 mg/l                | Fish                                                                             | 96 hours  |
| Bis(1-hydroxy-1H-pyridine-2-thionato- O,S)copper (Copper pyrithione)                                                                                                                                   | Acute LC50 1.1 ppm Fresh water     | Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss                       | 96 hours  |
|                                                                                                                                                                                                        | Chronic NOEC 0.02 mg/l Fresh water | Algae - Green algae - Pseudokirchneriella subcapitata - Exponential growth phase | 72 hours  |
|                                                                                                                                                                                                        | Acute EC50 <10 mg/l                | Daphnia                                                                          | 48 hours  |
|                                                                                                                                                                                                        | Acute IC50 <10 mg/l                | Algae                                                                            | 72 hours  |
|                                                                                                                                                                                                        | Acute LC50 <10 mg/l                | Fish                                                                             | 96 hours  |
|                                                                                                                                                                                                        | EC50 0.0012 mg/l                   | Algae - Skeletonema costatum                                                     | 120 hours |
|                                                                                                                                                                                                        | Acute EC50 0.022 mg/l              | Daphnia                                                                          | 48 hours  |
|                                                                                                                                                                                                        | Acute IC50 0.035 mg/l              | Algae                                                                            | 120 hours |
|                                                                                                                                                                                                        | Acute LC50 0.0043 mg/l             | Fish                                                                             | 96 hours  |
|                                                                                                                                                                                                        | Chronic NOEC 0.00046 mg/l          | Algae - Skeletonema costatum                                                     | 120 hours |

|                                    |                                                                          |
|------------------------------------|--------------------------------------------------------------------------|
| Conclusion/Summary                 | : This material is very toxic to aquatic life with long lasting effects. |
| 12.2 Persistence and degradability |                                                                          |
| Conclusion/Summary                 | : Not available.                                                         |

SECTION 12: Ecological information

| Product/ingredient name     | Aquatic half-life | Photolysis | Biodegradability |
|-----------------------------|-------------------|------------|------------------|
| copper oxide                | -                 | -          | Not readily      |
| xylene                      | -                 | -          | Readily          |
| ethylbenzene                | -                 | -          | Readily          |
| zinc oxide                  | -                 | -          | Not readily      |
| hydrocarbons, C9, aromatics | -                 | -          | Not readily      |

12.3 Bioaccumulative potential

| Product/ingredient name     | LogP <sub>ow</sub> | BCF         | Potential |
|-----------------------------|--------------------|-------------|-----------|
| xylene                      | 3.12               | 8.1 to 25.9 | low       |
| ethylbenzene                | 3.6                | -           | low       |
| zinc oxide                  | -                  | 28960       | high      |
| colophony                   | 1.9 to 7.7         | -           | high      |
| hydrocarbons, C9, aromatics | -                  | 10 to 2500  | high      |

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

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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

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

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes.

Waste catalogue

| Waste code | Waste designation                                                                 |
|------------|-----------------------------------------------------------------------------------|
| 08 01 11*  | Waste paint and varnish containing organic solvents or other dangerous substances |

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

| Type of packaging | Waste catalogue                                                                    |
|-------------------|------------------------------------------------------------------------------------|
| CEPE Guidelines   | 15 01 10* packaging containing residues of or contaminated by hazardous substances |

**SECTION 13: Disposal considerations**

**Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

**SECTION 14: Transport information**

|                                        | ADR/RID                                                                                                                                                                  | ADN                                                                                                                                                                      | IMDG                                                                                                                                                                        | IATA                                                                                     |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| <b>14.1 UN number</b>                  | UN1263                                                                                                                                                                   | UN1263                                                                                                                                                                   | UN1263                                                                                                                                                                      | UN1263                                                                                   |
| <b>14.2 UN proper shipping name</b>    | Paint                                                                                                                                                                    | Paint                                                                                                                                                                    | Paint. Marine pollutant (dicopper oxide)                                                                                                                                    | Paint                                                                                    |
| <b>14.3 Transport hazard class(es)</b> | 3<br>  | 3<br>  | 3<br>  | 3<br> |
| <b>14.4 Packing group</b>              | III                                                                                                                                                                      | III                                                                                                                                                                      | III                                                                                                                                                                         | III                                                                                      |
| <b>14.5 Environmental hazards</b>      | Yes.                                                                                                                                                                     | Yes.                                                                                                                                                                     | Yes.                                                                                                                                                                        | Yes. The environmentally hazardous substance mark is not required.                       |

**Additional information**

**ADR/RID** : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.  
**Hazard identification number** 30  
**Tunnel code** (D/E)

**ADN** : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.

**IMDG** : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.  
**Emergency schedules** F-E, S-E

**IATA** : The environmentally hazardous substance mark may appear if required by other transportation regulations.

**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.

**14.7 Transport in bulk according to IMO instruments** : Not available.

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****UK (GB)/REACH****Annex XIV - List of substances subject to authorisation****Annex XIV**

None of the components are listed.

**Substances of very high concern**

None of the components are listed.

SECTION 15: Regulatory information

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

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

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

| Category  |
|-----------|
| P5c<br>E1 |

EU regulations

Industrial emissions : Not listed  
(integrated pollution  
prevention and control) -  
Air

Industrial emissions : Not listed  
(integrated pollution  
prevention and control) -  
Water

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

15.2 Chemical safety : This product contains substances for which Chemical Safety Assessments are still  
assessment required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

**SECTION 16: Other information****Abbreviations and acronyms**

: ATE = Acute Toxicity Estimate  
 GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments  
 DMEL = Derived Minimal Effect Level  
 DNEL = Derived No Effect Level  
 EUH statement = GB CLP-specific Hazard statement  
 N/A = Not available  
 PBT = Persistent, Bioaccumulative and Toxic  
 PNEC = Predicted No Effect Concentration  
 RRN = REACH Registration Number  
 SGG = Segregation Group  
 vPvB = Very Persistent and Very Bioaccumulative

**Procedure used to derive the classification**

| Classification                                                                                                                                                                      | Justification                                                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Flam. Liq. 3, H226<br>Acute Tox. 4, H302<br>Acute Tox. 4, H332<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>Skin Sens. 1, H317<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 | On basis of test data<br>Calculation method<br>Calculation method<br>Calculation method<br>Calculation method<br>Calculation method<br>Calculation method<br>Calculation method |

**Full text of abbreviated H statements**

|        |                                                                    |
|--------|--------------------------------------------------------------------|
| H225   | Highly flammable liquid and vapour.                                |
| H226   | Flammable liquid and vapour.                                       |
| 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.                                 |
| 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.              |
| H411   | Toxic to aquatic life with long lasting effects.                   |
| H412   | Harmful to aquatic life with long lasting effects.                 |
| EUH066 | Repeated exposure may cause skin dryness or cracking.              |

**Full text of classifications**

|                   |                                                                 |
|-------------------|-----------------------------------------------------------------|
| Acute Tox. 2      | ACUTE TOXICITY - Category 2                                     |
| Acute Tox. 4      | ACUTE TOXICITY - Category 4                                     |
| Aquatic Acute 1   | SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1                  |
| Aquatic Chronic 1 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1                 |
| Aquatic Chronic 2 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2                 |
| Aquatic Chronic 3 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3                 |
| Asp. Tox. 1       | ASPIRATION HAZARD - Category 1                                  |
| Eye Dam. 1        | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1                  |
| Eye Irrit. 2      | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2                  |
| Flam. Liq. 2      | FLAMMABLE LIQUIDS - Category 2                                  |
| Flam. Liq. 3      | FLAMMABLE LIQUIDS - Category 3                                  |
| Skin Irrit. 2     | SKIN CORROSION/IRRITATION - Category 2                          |
| Skin Sens. 1      | SKIN SENSITISATION - Category 1                                 |
| STOT RE 2         | SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 |
| STOT SE 3         | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3   |

SECTION 16: Other information

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