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

#### 1.1 Product identifier

Product name : SeaForce 30

**UFI** : 9284-R04J-2006-6VDR

Product code : 1538
Product description : Paint.
Product type : Liquid.

Other means of

: Not available.

identification

#### 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 Jotun Paints (Europe) Ltd.

P.O.Box 2021 Stather Road

3202 Sandefjord Flixborough, Scunthorpe Norway North Lincolnshire

Tel: + 47 33 45 70 00 DN15 8RR Fax: +47 33 45 72 42 England

E-mail: SDSJotun@jotun.no

Tel: +44 17 24 40 00 00 Fax: +44 17 24 40 01 00

#### 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 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 2, H361d STOT SE 3, H335 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

Date of issue/Date of revision : 21.04.2023 Date of previous issue : 30.03.2023 Version : 1.02 1/22

#### **SECTION 2: Hazards identification**

#### **Hazard pictograms**

.











Signal word

: Danger.

**Hazard statements** 

: H226 - Flammable liquid and vapour.

H302 - Harmful if swallowed. H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction. H318 - Causes serious eye damage.

H335 - May cause respiratory irritation. H361d - Suspected of damaging the unborn child.

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

**Precautionary statements** 

General

**Prevention** 

: Not applicable.

: P201 - Obtain special instructions before use.

P280 - Wear protective gloves, protective clothing, eye protection, face protection,

or hearing 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.

P308 + P313 - IF exposed or concerned: Get medical advice or attention.

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 Disposal

: P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

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

Supplemental label elements

: EUH211 - Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Additional information

: Antifouling. Active substances: dicopper oxide (CAS 1317-39-1) 28.8% w/w, zineb (CAS 12122-67-7) 7.0% 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. 8237 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).
: Not applicable.

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

**Special packaging requirements** 

Date of issue/Date of revision : 21.04.2023 Date of previous issue : 30.03.2023 Version : 1.02 2/22

### **SECTION 2: Hazards identification**

Containers to be fitted with child-resistant

: Not applicable.

fastenings

Tactile warning of danger : Not applicable.

#### 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           |
|-------------------------|--|-----------|---|----------------|
| arcopper oxide          | REACH #:<br>01-2119513794-36<br>EC: 215-270-7<br>CAS: 1317-39-1<br>Index: 029-002-00-X | ≥25 - ≤50 | Acute Tox. 4, H302<br>Acute Tox. 4, H332<br>Eye Dam. 1, H318<br>Aquatic Acute 1, H400<br>(M=100)<br>Aquatic Chronic 1,<br>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 | ≥10 - ≤25 | 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,<br>H412 | [1] [2]        |
| colophony               | REACH #:<br>01-2119480418-32<br>EC: 232-475-7<br>CAS: 8050-09-7<br>Index: 650-015-00-7 | ≤10       | Skin Sens. 1, H317  | [1] [2]        |
| zineb                   | EC: 235-180-1<br>CAS: 12122-67-7<br>Index: 006-078-00-2                                | ≤10       | Flam. Sol. 1, H228<br>Skin Sens. 1, H317<br>Repr. 2, H361d<br>STOT SE 3, H335<br>Aquatic Acute 1, H400<br>(M=10)<br>Aquatic Chronic 1,<br>H410 (M=10)                             | [1]            |
| zinc oxide              | REACH #:<br>01-2119463881-32<br>EC: 215-222-5<br>CAS: 1314-13-2<br>Index: 030-013-00-7 | ≤10       | Aquatic Acute 1, H400<br>(M=1)<br>Aquatic Chronic 1,<br>H410 (M=1)  | [1]            |
| 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<br>(hearing organs)<br>Asp. Tox. 1, H304<br>Aquatic Chronic 3,<br>H412  | [1] [2]        |
| titanium dioxide        | REACH #:<br>01-2119489379-17<br>EC: 236-675-5  | ≤3        | Carc. 2, H351<br>(inhalation)   | [1] [2]<br>[*] |

Date of issue/Date of revision : 21.04.2023 Date of previous issue : 30.03.2023 Version : 1.02 3/22

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

| l <sub>e</sub>                                   |  |      |   |         |
|--|--|------|---|---------|
| 1-methoxy-2-propanol                             | CAS: 13463-67-7<br>Index: 022-006-00-2<br>REACH #:<br>01-2119457435-35<br>EC: 203-539-1<br>CAS: 107-98-2 | ≤3   | Flam. Liq. 3, H226<br>STOT SE 3, H336   | [1] [2] |
| hydrocarbons, C9, aromatics                      | Index: 603-064-00-3<br>REACH #:<br>01-2119455851-35<br>EC: 265-199-0<br>CAS: 64742-95-6                  | ≤3   | Flam. Liq. 3, H226<br>STOT SE 3, H335<br>STOT SE 3, H336<br>Asp. Tox. 1, H304<br>Aquatic Chronic 2,<br>H411   | [1]     |
| fatty acids, C14-18 and C16-18-unsatd., maleated | REACH #:<br>01-2119976378-19<br>EC: 288-306-2<br>CAS: 85711-46-2   | ≤0.3 | Skin Irrit. 2, H315<br>Skin Sens. 1, H317   | [1]     |
| maleic anhydride                                 | REACH #:<br>01-2119472428-31<br>EC: 203-571-6<br>CAS: 108-31-6<br>Index: 607-096-00-9                    | ≤0.1 | Acute Tox. 4, H302<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>Resp. Sens. 1, H334<br>Skin Sens. 1A, H317<br>STOT RE 1, H372<br>(respiratory system)<br>(inhalation)<br>STOT RE 2, H373<br>EUH071 | [1] [2] |
|  |  |      | See Section 16 for<br>the full text of the H<br>statements declared<br>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, 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
- [\*] The classification as a carcinogen by inhalation applies only to mixtures placed on the market in powder form containing 1% or more of titanium dioxide particles with aerodynamic diameter ≤ 10 µm not bound within a matrix.

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

est 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.

Date of issue/Date of revision : 21.04.2023 Date of previous issue : 30.03.2023 Version : 1.02 4/22

#### **SECTION 4: First aid measures**

#### 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

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, fatty acids, C14-18 and C16-18-unsatd., maleated, maleic anhydride. May produce an allergic reaction.

#### **Over-exposure signs/symptoms**

**Eye contact**: Adverse symptoms may include the following:

pain watering redness

**Inhalation** : Adverse symptoms may include the following:

respiratory tract irritation

coughing

reduced foetal weight increase in foetal deaths skeletal malformations

**Skin contact**: Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur reduced foetal weight increase in foetal deaths skeletal malformations

Date of issue/Date of revision : 21.04.2023 Date of previous issue : 30.03.2023 Version : 1.02 5/22

#### **SECTION 4: First aid measures**

Ingestion

Adverse symptoms may include the following: stomach pains

reduced foetal weight increase in foetal deaths skeletal malformations

#### 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.

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".

Date of issue/Date of revision : 21.04.2023 : 30.03.2023 Version : 1.02 6/22 Date of previous issue

#### **SECTION 6: Accidental release measures**

## **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

#### **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. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. 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.

#### 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** 

Date of issue/Date of revision : 21.04.2023 Date of previous issue : 30.03.2023 Version : 1.02 7/22

## **SECTION 7: Handling and storage**

|     | Notification and MAPP threshold | Safety report threshold |
|-----|---------------------------------|-------------------------|
| P5c | 5000 tonne                      | 50000 tonne             |
| E1  | 100 tonne                       | 200 tonne               |

See Technical Data Sheet / packaging for further information.

#### 7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific : Not available.

solutions

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

#### 8.1 Control parameters

#### **Occupational exposure limits**

| Product/ingredient name | Exposure limit values  |
|-------------------------|--|
| dicopper oxide          | EH40/2005 WELs (United Kingdom (UK), 1/2020).  STEL: 2 mg/m³, (as Cu) 15 minutes. Form: Dusts and Mists TWA: 1 mg/m³, (as Cu) 8 hours. Form: Dusts and Mists |
| xylene                  | EH40/2005 WELs (United Kingdom (UK), 1/2020). 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.   |
| colophony               | EH40/2005 WELs (United Kingdom (UK), 1/2020). Inhalation   |
| Colophony               | sensitiser.  |
|                         | STEL: 0.15 mg/m³ 15 minutes. Form: Fume  |
|                         | TWA: 0.05 mg/m <sup>3</sup> 8 hours. Form: Fume  |
| ethylbenzene            | EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed   |
| Ctry is crize in c      | through skin.  |
|                         | STEL: 552 mg/m³ 15 minutes.  |
|                         | STEL: 125 ppm 15 minutes.  |
|                         | TWA: 100 ppm 8 hours.  |
|                         | TWA: 441 mg/m³ 8 hours.  |
| titanium dioxide        | EH40/2005 WELs (United Kingdom (UK), 1/2020).  |
|                         | TWA: 4 mg/m³ 8 hours. Form: respirable   |
|                         | TWA: 10 mg/m³ 8 hours. Form: total inhalable   |
| 1-methoxy-2-propanol    | EH40/2005 WELs (United Kingdom (UK), 1/2020). 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.  |
| maleic anhydride        | EH40/2005 WELs (United Kingdom (UK), 1/2020). Inhalation   |
|                         | sensitiser.  |
|                         | STEL: 3 mg/m³ 15 minutes.  |
|                         | TWA: 1 mg/m³ 8 hours.  |

#### **Biological exposure indices**

No exposure indices known.

Recommended monitoring procedures

: Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous

#### **DNELs/DMELs**

Date of issue/Date of revision : 21.04.2023 Date of previous issue : 30.03.2023 Version : 1.02 8/22

substances will also be required.

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

| Product/ingredient name | Туре    | Exposure         | Value                  | Population     | Effects    |
|-------------------------|---------|------------------|------------------------|----------------|------------|
| <b>d</b> ícopper oxide  | DNEL    | Long term Oral   | 0.041 mg/              | General        | Systemic   |
|                         |         |                  | kg bw/day              | population     |            |
|                         | DNEL    | Short term Oral  | 0.082 mg/              | General        | Systemic   |
|                         |         |                  | kg bw/day              | population     |            |
|                         | DNEL    | Long term        | 1 mg/m³                | Workers        | Local      |
|                         |         | Inhalation       |                        |                |            |
|                         | DNEL    | Long term        | 1 mg/m³                | Workers        | Systemic   |
|                         |         | Inhalation       |                        |                |            |
|                         | DNEL    | Long term Dermal | 137 mg/kg              | Workers        | Systemic   |
|                         |         |                  | bw/day                 |                |            |
| xylene                  | DNEL    | Long term        | 65.3 mg/m <sup>3</sup> | General        | Local      |
|                         |         | Inhalation       |                        | population     |            |
|                         | DNEL    | Short term       | 260 mg/m <sup>3</sup>  | General        | Local      |
|                         |         | Inhalation       |                        | population     |            |
|                         | DNEL    | Short term       | 260 mg/m <sup>3</sup>  | General        | Systemic   |
|                         |         | Inhalation       |                        | population     |            |
|                         | DNEL    | Long term        | 221 mg/m <sup>3</sup>  | Workers        | Local      |
|                         |         | Inhalation       |                        |                |            |
|                         | DNEL    | Long term Oral   | 12.5 mg/               | General        | Systemic   |
|                         |         | -                | kg bw/day              | population     | -          |
|                         | DNEL    | Long term        | 65.3 mg/m <sup>3</sup> |                | Systemic   |
|                         |         | Inhalation       |                        | population     | -          |
|                         | DNEL    | Long term Dermal | 125 mg/kg              | General        | Systemic   |
|                         |         |                  | bw/day                 | population     | _          |
|                         | DNEL    | Long term Dermal | 212 mg/kg              | Workers        | Systemic   |
|                         |         |                  | bw/day                 |                |            |
|                         | DNEL    | Long term        | 221 mg/m <sup>3</sup>  | Workers        | Systemic   |
|                         |         | Inhalation       |                        |                |            |
|                         | DNEL    | Short term       | 442 mg/m <sup>3</sup>  | Workers        | Local      |
|                         |         | Inhalation       |                        |                |            |
|                         | DNEL    | Short term       | 442 mg/m <sup>3</sup>  | Workers        | Systemic   |
|                         |         | Inhalation       |                        |                |            |
| colophony               | DNEL    | Long term Dermal | 25 mg/kg               | Workers        | Systemic   |
| , ,                     |         |                  | bw/day                 |                |            |
|                         | DNEL    | Long term        | 176 mg/m <sup>3</sup>  | Workers        | Systemic   |
|                         |         | Inhalation       |                        |                |            |
|                         | DNEL    | Long term Dermal | 15 mg/kg               | General        | Systemic   |
|                         |         |                  | bw/day                 | population     |            |
|                         |         |                  |                        | [Consumers]    |            |
|                         | DNEL    | Long term        | 52 mg/m³               | General        | Systemic   |
|                         |         | Inhalation       |                        | population     |            |
|                         |         |                  |                        | [Consumers]    |            |
|                         | DNEL    | Long term Oral   | 15 mg/kg               | General        | Systemic   |
|                         |         |                  | bw/day                 | population     |            |
|                         | D       |                  | 4 00== :               | [Consumers]    |            |
|                         | DNEL    | Long term Oral   | 1.0655 mg/             | General        | Systemic   |
|                         | D       |                  | kg bw/day              | population     | 0          |
|                         | DNEL    | Long term Dermal | 1.0655 mg/             |                | Systemic   |
|                         | D       |                  | kg bw/day              | population     | 0          |
|                         | DNEL    | Long term Dermal | 2.131 mg/              | Workers        | Systemic   |
|                         | ראובי   | <br>             | kg bw/day              | \\/ = w  < =   |            |
|                         | DNEL    | Long term        | 10 mg/m <sup>3</sup>   | Workers        | Local      |
|                         | D. I.C. | Inhalation       | 00                     | NA/ = mlas = : | 0 4        |
| zinc oxide              | DNEL    | Long term Dermal | 83 mg/kg               | Workers        | Systemic   |
|                         | DVIE    | Long to          | bw/day                 | \\/orke==      | Cyptorsis  |
|                         | DNEL    | Long term        | 5 mg/m³                | Workers        | Systemic   |
|                         | ראובי   | Inhalation       | 00                     | Camaral        | C) mtaws!= |
|                         | DNEL    | Long term Dermal | 83 mg/kg               | General        | Systemic   |
|                         |         |                  | bw/day                 | population     |            |
|                         | DVIE    | Long to          | 0 E 1 3                | [Consumers]    | Cuatorsia  |
|                         | DNEL    | Long term        | 2.5 mg/m <sup>3</sup>  | General        | Systemic   |
|                         |         | innaiation       |                        | population     |            |
|                         |         | Inhalation       |                        | population     |            |

Date of issue/Date of revision : 21.04.2023 Date of previous issue : 30.03.2023 Version : 1.02 9/22

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

|                             |      | -                        |                               |                                      |          |
|-----------------------------|------|--------------------------|-------------------------------|--------------------------------------|----------|
|                             | DNEL | Long term Oral           | 0.83 mg/                      | [Consumers]<br>General               | Systemic |
|                             | DNEL | Long term                | kg bw/day<br>0.5 mg/m³        | population<br>[Consumers]<br>Workers | Local    |
|                             |      | Inhalation               | · ·                           |                                      |          |
|                             | DNEL | Long term Oral           | 0.83 mg/<br>kg bw/day         | General population                   | Systemic |
|                             | DNEL | Long term<br>Inhalation  | 2.5 mg/m <sup>3</sup>         | General population                   | Systemic |
|                             | DNEL | Long term<br>Inhalation  | 5 mg/m³                       | Workers                              | Systemic |
|                             | DNEL | Long term Dermal         | 83 mg/kg                      | General                              | Systemic |
|                             | DNEL | Long term Dermal         | bw/day<br>83 mg/kg<br>bw/day  | population<br>Workers                | Systemic |
| ethylbenzene                | DNEL | Long term Oral           | 1.6 mg/kg<br>bw/day           | General population                   | Systemic |
|                             | DNEL | Long term<br>Inhalation  | 15 mg/m <sup>3</sup>          | General<br>population                | Systemic |
|                             | DNEL | Long term<br>Inhalation  | 77 mg/m³                      | Workers                              | Systemic |
|                             | DNEL | Long term Dermal         | 180 mg/kg<br>bw/day           | Workers                              | Systemic |
|                             | DNEL | Short term<br>Inhalation | 293 mg/m <sup>3</sup>         | Workers                              | Local    |
|                             | DMEL | Long term<br>Inhalation  | 442 mg/m³                     | Workers                              | Local    |
|                             | DMEL | Short term<br>Inhalation | 884 mg/m³                     | Workers                              | Systemic |
| 1-methoxy-2-propanol        | DNEL | Long term Oral           | 33 mg/kg<br>bw/day            | General<br>population                | Systemic |
|                             | DNEL | Long term<br>Inhalation  | 43.9 mg/m <sup>3</sup>        |                                      | Systemic |
|                             | DNEL | Long term Dermal         | 78 mg/kg<br>bw/day            | General<br>population                | Systemic |
|                             | DNEL | Long term Dermal         | 183 mg/kg<br>bw/day           | Workers                              | Systemic |
|                             | DNEL | Long term<br>Inhalation  | 369 mg/m <sup>3</sup>         | Workers                              | Systemic |
|                             | DNEL | Short term<br>Inhalation | 553.5 mg/<br>m³               | Workers                              | Local    |
|                             | DNEL | Short term<br>Inhalation | 553.5 mg/<br>m³               | Workers                              | Systemic |
| hydrocarbons, C9, aromatics | DNEL | Long term Dermal         | 12.5 mg/<br>kg bw/day         | Workers                              | Systemic |
|                             | DNEL | Long term<br>Inhalation  | 151 mg/m³                     | Workers                              | Systemic |
|                             | DNEL | Long term Dermal         | 7.5 mg/kg<br>bw/day           | General population                   | Systemic |
|                             | DNEL | Long term<br>Inhalation  | 32 mg/m³                      | [Consumers]<br>General<br>population | Systemic |
|                             | DNEL | Long term Oral           | 7.5 mg/kg<br>bw/day           | [Consumers]<br>General<br>population | Systemic |
| fatty acids, C14-18 and     | DNEL | Long term Oral           | 1.5 mg/kg                     | [Consumers]<br>General               | Systemic |
| C16-18-unsatd., maleated    | DNEL | Long term Dermal         | bw/day<br>1.5 mg/kg<br>bw/day | population<br>General<br>population  | Systemic |
|                             | DNEL | Long term Dermal         | 3 mg/kg<br>bw/day             | Workers                              | Systemic |
| maleic anhydride            | DNEL | Long term                | 0.081 mg/                     | Workers                              | Local    |

Date of issue/Date of revision : 21.04.2023 Date of previous issue : 30.03.2023 Version : 1.02 10/22

## SECTION 8: Exposure controls/personal protection

|      | Inhalation        | m³                     |            |          |
|------|-------------------|------------------------|------------|----------|
| DNEL | Long term         | 0.081 mg/              | Workers    | Systemic |
|      | Inhalation        | m³                     |            |          |
| DNEL | Short term        | 0.2 mg/m <sup>3</sup>  | Workers    | Local    |
|      | Inhalation        |                        |            |          |
| DNEL | Short term        | 0.2 mg/m³              | Workers    | Systemic |
|      | Inhalation        |                        |            |          |
| DNEL | Long term         | 0.05 mg/m <sup>3</sup> | General    | Systemic |
|      | Inhalation        |                        | population |          |
| DNEL | Long term Oral    | 0.06 mg/               | General    | Systemic |
|      |                   | kg bw/day              | population |          |
| DNEL | Long term         | 0.08 mg/m <sup>3</sup> |            | Local    |
|      | Inhalation        |                        | population |          |
| DNEL | Short term Oral   | 0.1 mg/kg              | General    | Systemic |
|      |                   | bw/day                 | population |          |
| DNEL | Short term Dermal | 0.1 mg/kg              | General    | Systemic |
|      |                   | bw/day                 | population |          |
| DNEL | Long term Dermal  | 0.1 mg/kg              | General    | Systemic |
|      |                   | bw/day                 | population |          |
| DNEL | Short term Dermal | 0.2 mg/kg              | Workers    | Systemic |
| 5    |                   | bw/day                 |            |          |
| DNEL | Long term Dermal  | 0.2 mg/kg              | Workers    | Systemic |
|      |                   | bw/day                 |            |          |

#### **PNECs**

| Product/ingredient name | Compartment Detail     | Value            | Method Detail |
|-------------------------|------------------------|------------------|---------------|
| copper oxide            | Fresh water            | 7.8 µg/l         | -             |
|                         | Marine                 | 5.2 µg/l         | -             |
|                         | Sewage Treatment       | 230 µg/l         | -             |
|                         | Plant                  |                  |               |
|                         | Fresh water sediment   | 87 mg/kg dwt     | _             |
|                         | Marine water sediment  | 676 mg/kg dwt    | _             |
|                         | Soil                   | 65 mg/kg dwt     | _             |
| ylene                   | Fresh water            | 0.327 mg/l       | _             |
| ,                       | Marine                 | 0.327 mg/l       | _             |
|                         | Sewage Treatment       | 6.58 mg/l        | _             |
|                         | Plant                  | 0.00g,.          |               |
|                         | Fresh water sediment   | 12.46 mg/kg dwt  | _             |
|                         | Marine water sediment  | 12.46 mg/kg dwt  | _             |
|                         | Soil                   | 2.31 mg/kg dwt   | _             |
| olophony                | Fresh water            | 0.0054 mg/l      | _             |
| olophony                | Marine                 | 0.00054 mg/l     | _             |
|                         | Sewage Treatment       | 1000 mg/l        | _             |
|                         | Plant                  | 1000 mg/i        |               |
|                         | Fresh water sediment   | 0.02 mg/kg dwt   | _             |
|                         | Marine water sediment  | 0.002 mg/kg dwt  | _             |
|                         | Soil                   | 0.0015 mg/kg dwt |               |
| inc oxide               | Fresh water            | 20.6 µg/l        | _             |
| inc oxide               | Marine                 | 6.1 µg/l         | _             |
|                         |                        | 52 μg/l          | -             |
|                         | Sewage Treatment Plant | 32 µg/i          | -             |
|                         | Fresh water sediment   | 117.8 mg/kg dwt  |               |
|                         | Marine water sediment  | 56.5 mg/kg dwt   | _             |
|                         | Soil                   | 35.6 mg/kg dwt   | -             |
| thylbenzene             | Fresh water            | 0.1 mg/l         | _             |
| uryberizerie            | Marine                 | 0.01 mg/l        | -             |
|                         |                        | 9.6 mg/l         | -             |
|                         | Sewage Treatment Plant | 9.6 1119/1       | -             |
|                         | Fresh water sediment   | 13.7 mg/kg dwt   | -             |
|                         | Soil                   | 2.68 mg/kg dwt   | -             |
|                         | Secondary Poisoning    | 20 mg/kg         | -             |
| -methoxy-2-propanol     | Fresh water            | 10 mg/l          | -             |
| , , ,                   | Marine                 | 1 mg/l           | _             |

Date of issue/Date of revision : 21.04.2023 Date of previous issue : 30.03.2023 Version : 1.02 11/22

| Sea | Force 30                                       |                |   |
|-----|--|----------------|---|
| SI  | CTION 8: Exposure controls/personal protection | on             |   |
|     | Sewage Treatment                               | 100 mg/l       | - |
|     | Plant  |                |   |
|     | Fresh water sediment                           | 52.3 mg/kg dwt | - |
|     | Marine water sediment                          | 5.2 mg/kg dwt  | - |
|     | Soil   | 5.49 mg/kg dwt | - |

#### 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 ISO 16321-1:2022 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 ISO 374-1:2016.

May be used, gloves(breakthrough time) 4 - 8 hours: neoprene (> 0.35 mm)

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

Recommended, gloves(breakthrough time) > 8 hours: fluor rubber (> 0.35 mm), nitrile rubber (> 0.4 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**

: 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.

#### 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.

Date of issue/Date of revision : 21.04.2023 Date of previous issue : 30.03.2023 Version : 1.02 12/22

## SECTION 8: Exposure controls/personal protection

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** 

: Do not allow to enter drains or watercourses.

controls

## **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, Black, Blue. **Odour** : Characteristic. **Odour threshold** : Not applicable. Melting point/freezing point : Not applicable.

Initial boiling point and

boiling range

: Lowest known value: 120.17°C (248.3°F) (1-methoxy-2-propanol). Weighted

average: 137.73°C (279.9°F)

**Flammability** Upper/lower flammability or

explosive limits

: Not applicable. : 0.8 - 13.74%

Flash point : Closed cup: 25°C (77°F)

Lowest known value: 270°C (518°F) (1-methoxy-2-propanol). **Auto-ignition temperature** 

**Decomposition temperature** : Not available. pH : Not applicable.

**Viscosity** Kinematic (40°C): >20.5 mm<sup>2</sup>/s

Solubility(ies)

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

Partition coefficient: n-octanol/ : Not available.

water

Vapour pressure : Highest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighted

average: 0.93 kPa (6.98 mm Hg) (at 20°C)

**Evaporation rate** : Highest known value: 0.84 (ethylbenzene) Weighted average: 0.79compared

with butyl acetate

1.62 to 1.67 g/cm<sup>3</sup> **Density** 

: Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.64 (Air = 1) Vapour density

**Explosive properties** : Not available. **Oxidising properties** Not available.

**Particle characteristics** 

Median particle size : Not applicable.

#### 9.2 Other information

No additional information.

Date of issue/Date of revision : 21.04.2023 Date of previous issue : 30.03.2023 Version : 1.02 13/22

## SECTION 10: Stability and reactivity

10.1 Reactivity

10.2 Chemical stability

10.3 Possibility of hazardous reactions

Stable under recommended storage and handling conditions (see Section 7).Under normal conditions of storage and use, hazardous reactions will not occur.

ions

10.4 Conditions to avoid

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

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

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

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, fatty acids, C14-18 and C16-18-unsatd., maleated, maleic anhydride. May produce an allergic reaction.

#### **Acute toxicity**

| Product/ingredient name | Result                    | Species    | Dose        | Exposure |
|-------------------------|---------------------------|------------|-------------|----------|
| dicopper oxide          | LC50 Inhalation Dusts and | Rat        | 3.34 mg/l   | 4 hours  |
|                         | mists                     |            |             |          |
|                         | LD50 Oral                 | Rat        | 1340 mg/kg  | -        |
| xylene                  | LC50 Inhalation Vapour    | Rat        | 20 mg/l     | 4 hours  |
|                         | LD50 Oral                 | Rat        | 4300 mg/kg  | -        |
|                         | TDLo Dermal               | Rabbit     | 4300 mg/kg  | -        |
| zineb                   | LD50 Oral                 | Rat        | 1850 mg/kg  | -        |
| ethylbenzene            | LC50 Inhalation Vapour    | Rat - Male | 17.8 mg/l   | 4 hours  |
|                         | LD50 Dermal               | Rabbit     | >5000 mg/kg | -        |
|                         | LD50 Oral                 | Rat        | 3500 mg/kg  | -        |
| 1-methoxy-2-propanol    | LD50 Dermal               | Rabbit     | 13 g/kg     | -        |
|                         | LD50 Oral                 | Rat        | 6600 mg/kg  | _        |
| maleic anhydride        | LD50 Oral                 | Rat        | 400 mg/kg   | -        |

#### **Acute toxicity estimates**

| Product/ingredient name | Oral (mg/<br>kg) | Dermal<br>(mg/kg) | Inhalation<br>(gases)<br>(ppm) | Inhalation<br>(vapours)<br>(mg/l) | Inhalation<br>(dusts<br>and mists)<br>(mg/l) |
|-------------------------|------------------|-------------------|--------------------------------|-----------------------------------|--|
| SeaForce 30             | 1686.3           | 7503.1            | N/A                            | 99.2                              | 11.3   |
| dicopper oxide          | 500              | N/A               | N/A                            | N/A                               | 3.34   |
| xylene                  | 4300             | 1100              | N/A                            | 20                                | N/A  |
| ethylbenzene            | 3500             | N/A               | N/A                            | 17.8                              | N/A  |
| 1-methoxy-2-propanol    | 6600             | 13000             | N/A                            | N/A                               | N/A  |
| maleic annydride        | 400              | N/A               | N/A                            | N/A                               | N/A  |

Date of issue/Date of revision : 21.04.2023 Date of previous issue : 30.03.2023 Version : 1.02 14/22

## **SECTION 11: Toxicological information**

#### **Irritation/Corrosion**

| Product/ingredient name  | Result                             | Species                | Score | Exposure               | Observation |
|--------------------------|------------------------------------|------------------------|-------|------------------------|-------------|
| dícopper 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<br>mg     | -           |
|                          | Skin - Mild irritant               | Rabbit                 | -     | 24 hours 500<br>mg     | -           |
| titanium dioxide         | Skin - Mild irritant               | Human                  | -     | 72 hours               | -           |
| 1-methoxy-2-propanol     | Eyes - Mild irritant               | Rabbit                 | -     | 24 hours 500<br>mg     | -           |
|                          | Skin - Mild irritant               | Rabbit                 | -     | 500 mg                 | -           |
| fatty acids, C14-18 and  | Skin - Mild irritant               | Mammal -               | -     | -                      | -           |
| C16-18-unsatd., maleated |                                    | species<br>unspecified |       |                        |             |
| maleic anhydride         | Eyes - Severe irritant             | Rabbit                 | -     | 1 Percent              | -           |

#### **Sensitisation**

| Product/ingredient name                          | Route of exposure | Species                      | Result      |
|--|-------------------|------------------------------|-------------|
| colophony  | skin              | Mammal - species unspecified | Sensitising |
| zineb  | skin              | Mammal - species unspecified | Sensitising |
| fatty acids, C14-18 and C16-18-unsatd., maleated | skin              | Mammal - species unspecified | Sensitising |
| maleic anhydride                                 | skin              | Mammal - species unspecified | Sensitising |

#### **Mutagenicity**

No known significant effects or critical hazards.

#### **Carcinogenicity**

It has been observed that the carcinogenic hazard of this product arises when respirable dust is inhaled in quantities leading to significant impairment of particle clearance mechanisms in the lung.

No known significant effects or critical hazards.

#### **Reproductive toxicity**

| Product/ingredient name | Maternal toxicity | Fertility | Developmental toxin | Species       | Dose                         | Exposure |
|-------------------------|-------------------|-----------|---------------------|---------------|------------------------------|----------|
| zineb                   | -                 | -         |                     | unspecified ' | Route of exposure unreported | -        |

**Developmental effects** : Suspected of damaging the unborn child.

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

**Teratogenicity** 

Suspected of damaging the unborn child.

Specific target organ toxicity (single exposure)

Date of issue/Date of revision : 21.04.2023 Date of previous issue : 30.03.2023 Version : 1.02 15/22

## **SECTION 11: Toxicological information**

| Product/ingredient name     | Category   | Route of exposure | Target organs                |
|-----------------------------|------------|-------------------|------------------------------|
| xylene                      | Category 3 | -                 | Respiratory tract irritation |
| zineb                       | Category 3 | -                 | Respiratory tract irritation |
| 1-methoxy-2-propanol        | Category 3 | -                 | Narcotic effects             |
| 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<br>maleic anhydride | Category 2<br>Category 1<br>Category 2 |                   | hearing organs<br>respiratory system |

#### **Aspiration hazard**

| Product/ingredient name                               | Result   |
|---|--|
| xylene<br>ethylbenzene<br>hydrocarbons, C9, aromatics | ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 |

#### Potential acute health effects

Eye contact : Causes serious eye damage.Inhalation : May cause respiratory irritation.

**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:

respiratory tract irritation

coughing

reduced foetal weight increase in foetal deaths skeletal malformations

**Skin contact**: Adverse symptoms may include the following:

pain or irritation

redness

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

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed

to very low levels.

Other information : None identified.

Date of issue/Date of revision : 21.04.2023 Date of previous issue : 30.03.2023 Version : 1.02 16/22

## **SECTION 12: Ecological information**

#### 12.1 Toxicity

There are no data available on the mixture itself.

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 |
|-----------------------------|------------------------------------|---|----------|
| dicopper oxide              | Acute LC50 0.075 mg/l Fresh water  | Fish - Zebra danio - Danio rerio                          | 96 hours |
|                             | Chronic NOEC 0.001 mg/l            | Algae   | -        |
|                             | Chronic NOEC 0.0052 mg/l           | Algae   | -        |
| xylene                      | Acute LC50 8500 µg/l Marine water  | Crustaceans - Daggerblade                                 | 48 hours |
|                             |                                    | grass shrimp - Palaemonetes                               |          |
|                             |                                    | pugio   |          |
|                             | Acute LC50 13400 μg/l Fresh water  | Fish - Fathead minnow -                                   | 96 hours |
|                             |                                    | Pimephales promelas                                       |          |
| zineb                       | Acute EC50 0.38 mg/l Fresh water   | Algae - Green algae -                                     | 96 hours |
|                             | <del>-</del>                       | Pseudokirchneriella subcapitata                           |          |
|                             | Acute LC50 970 to 1800 µg/l Fresh  | Daphnia - Water flea - Daphnia                            | 48 hours |
|                             | water                              | magna   |          |
|                             | Acute LC50 0.225 mg/l              | Fish - Trout  | 96 hours |
|                             | Acute LC50 20.8 ppm Fresh water    | Fish - Rainbow trout,donaldson                            | 96 hours |
|                             |                                    | trout - Oncorhynchus mykiss                               |          |
|                             | Chronic NOEC 0.05 mg/l Fresh water | Algae - Green algae - Chlorella                           | 96 hours |
|                             |                                    | vulgaris  |          |
|                             | Chronic NOEC 0.05 mg/l Fresh water | Algae - Green algae -                                     | 96 hours |
|                             |                                    | Scenedesmus quadricauda                                   |          |
| zinc oxide                  | Acute LC50 1.1 ppm Fresh water     | Fish - Rainbow trout,donaldson                            | 96 hours |
|                             |                                    | trout - Oncorhynchus mykiss                               |          |
|                             | Chronic NOEC 0.02 mg/l Fresh water | Algae - Green algae -                                     | 72 hours |
|                             |                                    | Pseudokirchneriella subcapitata                           |          |
|                             |                                    | - Exponential growth phase                                |          |
| ethylbenzene                | Acute EC50 7700 μg/l Marine water  | Algae - Diatom - Skeletonema costatum                     | 96 hours |
|                             | Acute EC50 2.93 mg/l               | Daphnia   | 48 hours |
|                             | Acute LC50 4.2 mg/l                | Fish  | 96 hours |
| titanium dioxide            | Acute LC50 3 mg/l Fresh water      | Crustaceans - Water flea -                                | 48 hours |
|                             | -                                  | Ceriodaphnia dubia - Neonate                              |          |
|                             | Acute LC50 6.5 mg/l Fresh water    | Daphnia - Water flea - Daphnia                            | 48 hours |
|                             | -                                  | pulex - Neonate   |          |
|                             | Acute LC50 >1000000 µg/l Marine    | Fish - Mummichog - Fundulus                               | 96 hours |
|                             | water                              | heteroclitus  |          |
| hydrocarbons, C9, aromatics | Acute EC50 <10 mg/l                | Daphnia   | 48 hours |
| -                           | Acute IC50 <10 mg/l                | Algae   | 72 hours |
|                             | Acute LC50 <10 mg/l                | Fish  | 96 hours |
| maleic anhydride            | Acute LC50 230 ppm Fresh water     | Fish - Western mosquitofish -<br>Gambusia affinis - Adult | 96 hours |

**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.

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

#### 12.3 Bioaccumulative potential

Date of issue/Date of revision : 21.04.2023 Date of previous issue : 30.03.2023 Version : 1.02 17/22

## **SECTION 12: Ecological information**

| Product/ingredient name     | LogPow     | BCF         | Potential |
|-----------------------------|------------|-------------|-----------|
| <mark>⋉</mark> ylene        | 3.12       | 8.1 to 25.9 | low       |
| colophony                   | 1.9 to 7.7 | -           | high      |
| zineb                       | 1.3        | -           | low       |
| zinc oxide                  | -          | 28960       | high      |
| ethylbenzene                | 3.6        | -           | low       |
| 1-methoxy-2-propanol        | <1         | -           | low       |
| hydrocarbons, C9, aromatics | -          | 10 to 2500  | high      |
| maleic anhydride            | -2.78      | -           | low       |

#### 12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: 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.

Yes.

## **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**

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 |  |  |

#### **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.

Date of issue/Date of revision : 21.04.2023 Date of previous issue : 30.03.2023 Version : 1.02 18/22

## **SECTION 14: Transport information**

|                                  | ADR/RID | ADN    | IMDG                                     | IATA   |
|----------------------------------|---------|--------|--|--|
| 14.1 UN number                   | UN1263  | UN1263 | UN1263                                   | UN1263   |
| 14.2 UN proper shipping name     | Paint   | Paint  | Paint. Marine pollutant (dicopper oxide) | Paint  |
| 14.3 Transport hazard class(es)  | 3       | 3      | 3  | 3  |
| 14.4 Packing group               | III     | III    | III                                      | III  |
| 14.5<br>Environmental<br>hazards | 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 : 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.

**Ozone depleting substances** 

Not listed.

**Prior Informed Consent (PIC)** 

Not listed.

**Persistent Organic Pollutants** 

Not listed.

Date of issue/Date of revision : 21.04.2023 : 30.03.2023 Version : 1.02 19/22 Date of previous issue

## SECTION 15: Regulatory information

**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 E1

## EU regulations

Industrial emissions : 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 assessment

 This product contains substances for which Chemical Safety Assessments are still required.

### **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

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

Date of issue/Date of revision : 21.04.2023 Date of previous issue : 30.03.2023 Version : 1.02 20/22

### **SECTION 16: Other information**

Key literature references and sources for data

: This product does not contain organotin compounds acting as biocides and complies with the International Convention on the Control of Harmful Anti-fouling Systems on Ships as adopted by IMO in October 2001 (IMO document AFS/CONF/26).

#### Procedure used to derive the classification

| Classification          | Justification         |
|-------------------------|-----------------------|
| Flam. Liq. 3, H226      | On basis of test data |
| Acute Tox. 4, H302      | Calculation method    |
| Skin Irrit. 2, H315     | Calculation method    |
| Eye Dam. 1, H318        | Calculation method    |
| Skin Sens. 1, H317      | Calculation method    |
| Repr. 2, H361d          | Calculation method    |
| STOT SE 3, H335         | Calculation method    |
| Aquatic Acute 1, H400   | Calculation method    |
| Aquatic Chronic 1, H410 | Calculation method    |

#### Full text of abbreviated H statements

| <b>H</b> 225 | 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.  |
| H314         | Causes severe skin burns and eye damage.                                   |
| H315         | Causes skin irritation.  |
| H317         | May cause an allergic skin reaction.                                       |
| H318         | Causes serious eye damage.   |
| H319         | Causes serious eye irritation.   |
| H332         | Harmful if inhaled.  |
| H334         | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335         | May cause respiratory irritation.  |
| H336         | May cause drowsiness or dizziness.   |
| H351         | Suspected of causing cancer.   |
| H361d        | Suspected of damaging the unborn child.                                    |
| H372         | Causes damage to organs through prolonged or repeated exposure.            |
| 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.                         |
| EUH071       | Corrosive to the respiratory tract.  |

### Full text of classifications

| Acute Tox. 4 Aquatic Acute 1 Aquatic Chronic 1 | ACUTE TOXICITY - Category 4 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 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 2  LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3                           |
| •  | , ,  |
| Asp. Tox. 1                                    | ASPIRATION HAZARD - Category 1   |
| Carc. 2  | CARCINOGENICITY - Category 2   |
| 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   |
| Flam. Sol. 1                                   | FLAMMABLE SOLIDS - Category 1  |
| Repr. 2  | REPRODUCTIVE TOXICITY - Category 2   |
| Resp. Sens. 1                                  | RESPIRATORY SENSITISATION - Category 1   |
| Skin Corr. 1B                                  | SKIN CORROSION/IRRITATION - Category 1B  |
| Skin Irrit. 2                                  | SKIN CORROSION/IRRITATION - Category 2   |
| Skin Sens. 1                                   | SKIN SENSITISATION - Category 1  |
| Skin Sens. 1A                                  | SKIN SENSITISATION - Category 1A   |
| STOT RE 1                                      | SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1  |

Date of issue/Date of revision : 21.04.2023 Date of previous issue : 30.03.2023 Version : 1.02 21/22

#### SECTION 16: Other information

STOT RE 2 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 STOT SE 3 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

Date of printing : 21.04.2023 Date of issue/ Date of : 21.04.2023

revision

Date of previous issue : 30.03.2023

Version : 1.02

#### **Notice to reader**

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.

Date of issue/Date of revision : 21.04.2023 Date of previous issue : 30.03.2023 Version : 1.02 22/22