

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878 - Europe

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

#### 1.1 Product identifier

Product name : Hempel's Antifouling Atlantic+  
Product identity : 7385051110  
Product type : antifouling paint self polishing

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

Field of application : ships and shipyards.  
Identified uses : Industrial applications, Professional applications, Used by spraying.

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

Company details : HEMPEL A/S  
Lundtoftegårdsvej 91  
DK-2800 Kgs. Lyngby  
Denmark  
Tel.: + 45 45 93 38 00  
hempel@hempel.com  
Date of issue : 21 November 2022  
Date of previous issue : 15 November 2021.

#### 1.4 Emergency telephone number

Emergency telephone number (with hours of operation)  
  
+45 45 93 38 00 (08.00 - 17.00)  
See section 4 First aid measures.

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Product definition : Mixture

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

|                         |                                    |
|-------------------------|------------------------------------|
| Flam. Liq. 3, H226      | FLAMMABLE LIQUIDS                  |
| Skin Irrit. 2, H315     | SKIN CORROSION/IRRITATION          |
| Eye Dam. 1, H318        | SERIOUS EYE DAMAGE/ EYE IRRITATION |
| Skin Sens. 1, H317      | SKIN SENSITIZATION                 |
| Carc. 2, H351           | CARCINOGENICITY                    |
| Repr. 2, H361d          | TOXIC TO REPRODUCTION              |
| Aquatic Acute 1, H400   | AQUATIC HAZARD (ACUTE)             |
| Aquatic Chronic 1, H410 | AQUATIC HAZARD (LONG-TERM)         |

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

#### 2.2 Label elements


Hazard pictograms :



Signal word : Danger

Hazard statements :  
H226 - Flammable liquid and vapor.  
H315 - Causes skin irritation.  
H317 - May cause an allergic skin reaction.  
H318 - Causes serious eye damage.  
H351 - Suspected of causing cancer.  
H361d - Suspected of damaging the unborn child.  
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements :

Prevention :  Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment.

Response : Collect spillage. 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.

### SECTION 2: Hazards identification

Hazardous ingredients :  
■ Copper (I) oxide  
 rosin  
 zineb (ISO)  
 4-methylpentan-2-one  
 2,5-di-tert-butylhydroquinone  
 formaldehyde

Supplemental label elements :

#### Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

#### 2.3 Other hazards

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

| Product/ingredient name                              | Identifiers   | %         | Regulation (EC) No. 1272/2008 [CLP]   | Type  |         |
|--|---|-----------|---|---|---------|
| <span style="color: blue;">■</span> Copper (I) oxide | REACH #: 01-2119513794-36<br>EC: 215-270-7<br>CAS: 1317-39-1<br>Index: 029-002-00-X | ≥10 - ≤25 | Acute Tox. 4, H302<br>Acute Tox. 4, H332<br>Eye Dam. 1, H318<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410          | ATE [Oral] = 500 mg/kg<br>ATE [Inhalation (dusts and mists)] = 3.34 mg/l<br>M [Acute] = 100<br>M [Chronic] = 10 | [1]     |
| rosin  | REACH #: 01-2119480418-32<br>EC: 232-475-7<br>CAS: 8050-09-7<br>Index: 650-015-00-7 | ≥10 - ≤25 | Skin Sens. 1, H317  | -   | [1]     |
| xylene   | REACH #: 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                                     | ATE [Dermal] = 1100 mg/kg<br>ATE [Inhalation (gases)] = 5000 ppm  | [1] [2] |
| zinc oxide   | REACH #: 01-2119463881-32<br>EC: 215-222-5<br>CAS: 1314-13-2<br>Index: 030-013-00-7 | ≥5 - ≤10  | Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410  | M [Acute] = 1<br>M [Chronic] = 1  | [1]     |
| zineb (ISO)  | EC: 235-180-1<br>CAS: 12122-67-7<br>Index: 006-078-00-2                             | ≥5 - ≤10  | Flam. Sol. 1, H228<br>Skin Sens. 1, H317<br>Repr. 2, H361d<br>STOT SE 3, H335<br>Aquatic Chronic 1, H410                  | M [Chronic] = 1   | [1]     |
| ethylbenzene   | REACH #: 01-2119489370-35<br>EC: 202-849-4<br>CAS: 100-41-4<br>Index: 601-023-00-4  | ≥1 - ≤3   | Flam. Liq. 2, H225<br>Acute Tox. 4, H332<br>STOT RE 2, H373<br>(hearing organs)<br>Asp. Tox. 1, H304<br>STOT SE 3, H336   | ATE [Inhalation (vapours)] = 11 mg/l  | [1] [2] |
| C10 aromatics hydrocarbons, <1% naphthalene          | REACH #: 01-2119463583-34<br>EC: 265-198-5<br>CAS: 64742-94-5                       | ≥1 - ≤3   | Asp. Tox. 1, H304<br>Aquatic Chronic 2, H411<br>EUH066  | -   | [1] [2] |
| 4-methylpentan-2-one                                 | REACH #: 01-2119473980-30<br>EC: 203-550-1<br>CAS: 108-10-1<br>Index: 606-004-00-4  | ≥1 - ≤3   | Flam. Liq. 2, H225<br>Acute Tox. 4, H332<br>Eye Irrit. 2, H319<br>Carc. 2, H351<br>STOT SE 3, H336<br>EUH066              | ATE [Inhalation (vapours)] = 11 mg/l  | [1] [2] |
| butan-1-ol   | REACH #: 01-2119484630-38<br>EC: 200-751-6<br>CAS: 71-36-3<br>Index: 603-004-00-6   | ≤1.4      | Flam. Liq. 3, H226<br>Acute Tox. 4, H302<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>STOT SE 3, H335<br>STOT SE 3, H336 | ATE [Oral] = 790 mg/kg  | [1]     |
| cupric oxide   | EC: 215-269-1<br>CAS: 1317-38-0<br>Index: 029-016-00-6                              | ≤1        | Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410  | M [Acute] = 100<br>M [Chronic] = 10   | [1]     |
| 2,5-di-tert-butylhydroquinone                        | REACH #: 01-2120766295-46<br>EC: 201-841-8<br>CAS: 88-58-4                          | ≤0.3      | Acute Tox. 3, H301<br>Skin Sens. 1B, H317<br>STOT SE 3, H335  | ATE [Oral] = 100 mg/kg<br>M [Acute] = 10<br>M [Chronic] = 10  | [1]     |

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

|              |  |      |   |   |         |
|--------------|--|------|---|---|---------|
| toluene      | REACH #: 01-2119471310-51<br>EC: 203-625-9<br>CAS: 108-88-3<br>Index: 601-021-00-3 | ≤0.3 | Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410<br>Flam. Liq. 2, H225<br>Skin Irrit. 2, H315<br>Repr. 2, H361d<br>STOT SE 3, H336<br>STOT RE 2, H373<br>Asp. Tox. 1, H304            | [1] [2]   |         |
| formaldehyde | REACH #: 01-2119488953-20<br>EC: 200-001-8<br>CAS: 50-00-0<br>Index: 605-001-00-5  | <0.1 | Acute Tox. 3, H301<br>Acute Tox. 3, H311<br>Acute Tox. 2, H330<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>Skin Sens. 1, H317<br>Muta. 2, H341<br>Carc. 1B, H350<br>STOT SE 3, H335 | ATE [Oral] = 100 mg/kg<br>ATE [Dermal] = 270 mg/kg<br>ATE [Inhalation (gases)] = 250 ppm<br>Skin Irrit. 2, H315: 5% ≤ C < 25%<br>Skin Corr. 1B, H314: C ≥ 25%<br>Eye Dam. 1, H318: C ≥ 25%<br>Eye Irrit. 2, H319: 5% ≤ C < 25%<br>Skin Sens. 1, H317: C ≥ 0.2%<br>STOT SE 3, H335: C ≥ 5% | [1] [2] |
|              |  |      | See Section 16 for the full text of the H statements declared above.  |   |         |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

**Type**

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit, see section 8.

**Active substances**

| Product/ingredient name (% by weight) |
|---------------------------------------|
| copper (I) oxide (21.6 % by weight)   |
| zineb (ISO) (7.1 % by weight)         |

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

- General : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.  
 If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 112 and give immediate treatment (first aid).
- Eye contact : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. In all cases of doubt, or when symptoms persist, seek medical attention.
- Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Give nothing by mouth. If unconscious, place in recovery position and get medical attention immediately.
- Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Ingestion : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so that vomit will not re-enter the mouth and throat.
- 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**

**Potential acute health effects**

- Eye contact : Causes serious eye damage.
- Inhalation : No known significant effects or critical hazards.
- Skin contact : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion : No known significant effects or critical hazards.

**Over-exposure signs/symptoms**

### SECTION 4: First aid measures

|                |  |
|----------------|--|
| Eye contact :  | Adverse symptoms may include the following:<br>pain<br>watering<br>redness   |
| Inhalation :   | Adverse symptoms may include the following:<br>reduced fetal weight<br>increase in fetal deaths<br>skeletal malformations  |
| Skin contact : | Adverse symptoms may include the following:<br>pain or irritation<br>redness<br>blistering may occur<br>reduced fetal weight<br>increase in fetal deaths<br>skeletal malformations |
| Ingestion :    | Adverse symptoms may include the following:<br>stomach pains<br>reduced fetal weight<br>increase in fetal deaths<br>skeletal malformations   |

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

|                       |  |
|-----------------------|--|
| Notes to physician :  | If gasses have been inhaled, from the decomposition of the product, symptoms may be delayed. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| Specific treatments : | No specific treatment.   |

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

|                       |   |
|-----------------------|---|
| Extinguishing media : | Recommended: alcohol resistant foam, CO <sub>2</sub> , powders, water spray.<br>Not to be used: waterjet. |
|-----------------------|---|

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

|   |  |
|---|--|
| Hazards from the substance or mixture : | Flammable liquid and vapor. 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 oxides nitrogen oxides sulfur oxides metal oxide/oxides   |

#### 5.3 Advice for firefighters

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. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

### SECTION 6: Accidental release measures

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

Avoid all direct contact with the spilled material. Exclude sources of ignition and be aware of explosion hazard. Ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

#### 6.2 Environmental precautions

Avoid dispersal of spilled 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.

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

### SECTION 6: Accidental release measures

Stop leak if without risk. Move containers from spill area. Approach 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). Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product.

#### 6.4 Reference to other sections

See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should be used only in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. No sparking tools should be used.

Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

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

Store in accordance with local regulations. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

#### 7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions.

Specific end use(s) : Antifouling products.

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

| Product/ingredient name                     | Exposure limit values   |
|---|---|
| xylene                                      | <b>EU OEL (Europe, 1/2022). [xylene, mixed isomers] Absorbed through skin.</b><br>TWA: 50 ppm 8 hours.<br>TWA: 221 mg/m <sup>3</sup> 8 hours.<br>STEL: 100 ppm 15 minutes.<br>STEL: 442 mg/m <sup>3</sup> 15 minutes. |
| ethylbenzene                                | <b>EU OEL (Europe, 1/2022). Absorbed through skin.</b><br>STEL: 884 mg/m <sup>3</sup> 15 minutes.<br>STEL: 200 ppm 15 minutes.<br>TWA: 442 mg/m <sup>3</sup> 8 hours.<br>TWA: 100 ppm 8 hours.                        |
| C10 aromatics hydrocarbons, <1% naphthalene | <b>EU OEL (Europe, 2000).</b><br>TWA: 25 ppm 8 hours.   |
| 4-methylpentan-2-one                        | <b>EU OEL (Europe, 1/2022).</b><br>TWA: 20 ppm 8 hours.<br>TWA: 83 mg/m <sup>3</sup> 8 hours.<br>STEL: 50 ppm 15 minutes.<br>STEL: 208 mg/m <sup>3</sup> 15 minutes.  |
| toluene                                     | <b>EU OEL (Europe, 1/2022). Absorbed through skin.</b><br>TWA: 192 mg/m <sup>3</sup> 8 hours.<br>TWA: 50 ppm 8 hours.<br>STEL: 384 mg/m <sup>3</sup> 15 minutes.<br>STEL: 100 ppm 15 minutes.                         |
| formaldehyde                                | <b>EU OEL (Europe, 1/2022). Skin sensitizer.</b><br>STEL: 0.6 ppm 15 minutes.<br>STEL: 0.74 mg/m <sup>3</sup> 15 minutes.<br>TWA: 0.62 ppm 8 hours.<br>TWA: 0.5 mg/m <sup>3</sup> 8 hours.                            |

#### Recommended monitoring procedures

### SECTION 8: Exposure controls/personal protection

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

#### Derived effect levels

Not applicable.

#### Predicted effect concentrations

Not applicable.

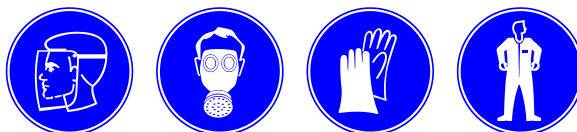
### 8.2 Exposure controls

#### Appropriate engineering controls

Arrange sufficient ventilation by local exhaust ventilation and good general ventilation to keep the airborne concentrations of vapors or dust lowest possible and below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the workstation location.

#### Individual protection measures

General : Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. Safety eyewear should be used when there is a likelihood of exposure.



Hygiene measures : Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.

Eye/face protection : Safety eyewear complying with an approved standard 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.

Hand protection : Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training. The quality of the chemical-resistant protective gloves must be chosen as a function of the specific workplace concentrations and quantity of hazardous substances.

Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the appropriate type. Below listed glove(s) should be regarded as generic advice:

Recommended: Silver Shield / Barrier / 4H gloves, polyvinyl alcohol (PVA), Viton®

May be used: nitrile rubber

Short term exposure: neoprene rubber, butyl rubber, natural rubber (latex), polyvinyl chloride (PVC)

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved handling this product.

Wear suitable protective clothing. Always wear protective clothing when spraying.

Respiratory protection : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If working areas have insufficient ventilation: When the product is applied by means that will not generate an aerosol such as, brush or roller wear half or totally covering mask equipped with gas filter of type A, when grinding use particle filter of type P. Be sure to use an approved/certified respirator or equivalent.

#### Environmental exposure controls

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



### SECTION 9: Physical and chemical properties

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

|  |   |
|--|---|
| Physical state :                               | Liquid.   |
| Color :  | Brown.  |
| Odor :   | Solvent-like  |
| pH :   | Testing not relevant or not possible due to nature of the product.  |
| Melting point/freezing point :                 | Testing not relevant or not possible due to nature of the product.  |
| Boiling point/boiling range :                  | Testing not relevant or not possible due to nature of the product.  |
| Flash point :                                  | Closed cup: 24°C (75.2°F)   |
| Evaporation rate :                             | Testing not relevant or not possible due to nature of the product.  |
| Flammability :                                 | Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.<br>Flammable in the presence of the following materials or conditions: oxidizing materials.<br>Slightly flammable in the presence of the following materials or conditions: reducing materials. |
| Lower and upper explosive (flammable) limits : | 0.5 - 11.3 vol %  |
| Vapor pressure :                               | Testing not relevant or not possible due to nature of the product.  |
| Vapor density :                                | Testing not relevant or not possible due to nature of the product.  |
| Specific gravity :                             | 1.692 g/cm <sup>3</sup>   |
| Partition coefficient (LogKow) :               | Testing not relevant or not possible due to nature of the product.  |
| Auto-ignition temperature :                    | Lowest known value: 220 - 250°C (428 - 482°F) (C10 aromatics hydrocarbons, <1% naphthalene).  |
| Decomposition temperature :                    | Testing not relevant or not possible due to nature of the product.  |
| Viscosity :                                    | Aspiration hazard (H304) Not classified. Testing not relevant due to nature of the product.   |
| Explosive properties :                         | Explosive in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.  |
| Oxidizing properties :                         | Testing not relevant or not possible due to nature of the product.  |

#### 9.2 Other information

|                          |   |
|--------------------------|---|
| Solvent(s) % by weight : | Weighted average: 22 %                    |
| Water % by weight :      | Weighted average: 0 %                     |
| VOC content :            | 365.9 g/l                                 |
| TOC Content :            | Weighted average: 322 g/l                 |
| Solvent Gas :            | Weighted average: 0.083 m <sup>3</sup> /l |

### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

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

#### 10.2 Chemical stability

The product is stable.

#### 10.3 Possibility of hazardous reactions

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

#### 10.4 Conditions to avoid

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

#### 10.5 Incompatible materials

Highly reactive or incompatible with the following materials: oxidizing materials and reducing materials.  
Reactive or incompatible with the following materials: organic materials, acids, alkalis and moisture.

#### 10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:

### SECTION 10: Stability and reactivity

Decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides metal oxide/oxides

### SECTION 11: Toxicological information

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

Exposure to component solvent vapor concentrations 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. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation 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. Accidental swallowing may cause stomach pain. Chemical lung inflammation may occur if the product is taken into the lungs via vomiting.

#### Acute toxicity

| Product/ingredient name                     | Result                          | Species               | Dose                    | Exposure |
|---|---------------------------------|-----------------------|-------------------------|----------|
| copper (I) oxide                            | LC50 Inhalation Dusts and mists | Rat                   | 3.34 mg/l               | 4 hours  |
|   | LD50 Dermal                     | Rat                   | >2000 mg/kg             | -        |
|   | LD50 Oral                       | Rat                   | 1340 mg/kg              | -        |
| rosin                                       | LD50 Dermal                     | Rat                   | >2000 mg/kg             | -        |
|   | LD50 Oral                       | Rat                   | 2800 mg/kg              | -        |
| xylene                                      | LC50 Inhalation Gas.            | Rat                   | 5000 ppm                | 4 hours  |
|   | LC50 Inhalation Vapor           | Rat                   | 6350 ppm                | 4 hours  |
|   | LD50 Dermal                     | Rabbit                | >4200 mg/kg             | -        |
| zinc oxide                                  | LD50 Oral                       | Rat                   | 3523 mg/kg              | -        |
|   | LC50 Inhalation Dusts and mists | Rat                   | >5.7 mg/l               | 4 hours  |
|   | LD50 Dermal                     | Rat                   | >2000 mg/kg             | -        |
| zineb (ISO)                                 | LD50 Oral                       | Rat                   | >5000 mg/kg             | -        |
|   | LC50 Inhalation Dusts and mists | Rat                   | >5 mg/l                 | 4 hours  |
|   | LD50 Dermal                     | Rat                   | >2000 mg/kg             | -        |
| ethylbenzene                                | LD50 Oral                       | Rat                   | >2000 mg/kg             | -        |
|   | LD50 Dermal                     | Rabbit                | >5000 mg/kg             | -        |
|   | LD50 Oral                       | Rat                   | 3500 mg/kg              | -        |
| C10 aromatics hydrocarbons, <1% naphthalene | LD50 Oral                       | Rat                   | 5000 mg/kg              | -        |
|   | LD Dermal                       | Rabbit                | >3 g/kg                 | -        |
|   | LC50 Inhalation Vapor           | Rat                   | 24000 mg/m <sup>3</sup> | 4 hours  |
| 4-methylpentan-2-one                        | LD50 Dermal                     | Rabbit                | 3400 mg/kg              | -        |
|   | LD50 Oral                       | Rat                   | 790 mg/kg               | -        |
|   | LD50 Dermal                     | Rat                   | >4000 mg/kg             | -        |
| 2,5-di-tert-butylhydroquinone               | LD50 Oral                       | Rat                   | 50 - 300 mg/kg          | -        |
|   | LC50 Inhalation Vapor           | Rat                   | >20 mg/l                | 4 hours  |
|   | LD50 Oral                       | Rat                   | 636 mg/kg               | -        |
| toluene                                     | LC50 Inhalation Gas.            | Rat                   | 250 ppm                 | 4 hours  |
|   | LC50 Inhalation Vapor           | Rat - Male,<br>Female | 0.58 mg/l               | 4 hours  |
|   | LD50 Dermal                     | Rabbit                | 270 mg/kg               | -        |
| formaldehyde                                | LD50 Oral                       | Rat                   | 100 mg/kg               | -        |

#### Acute toxicity estimates

| Product/ingredient name                     | Oral mg/kg | Dermal mg/kg | Inhalation (gases) ppm | Inhalation (vapors) mg/l | Inhalation (dusts and mists) mg/l |
|---|------------|--------------|------------------------|--------------------------|-----------------------------------|
| Hempel's Antifouling Atlantic+              | 2804.6     | 11062        | 50281.9                | 361.6                    | 20.6                              |
| copper (I) oxide                            | 500        |              |                        |                          | 3.34                              |
| rosin                                       | 2800       |              |                        |                          |                                   |
| xylene                                      | 3523       | 1100         | 5000                   |                          |                                   |
| ethylbenzene                                | 3500       |              |                        | 11                       |                                   |
| C10 aromatics hydrocarbons, <1% naphthalene | 5000       |              |                        |                          |                                   |
| 4-methylpentan-2-one                        |            |              |                        | 11                       |                                   |
| butan-1-ol                                  | 790        | 3400         |                        | 24                       |                                   |
| 2,5-di-tert-butylhydroquinone               | 100        |              |                        |                          |                                   |
| formaldehyde                                | 100        | 270          | 250                    | 0.58                     |                                   |

#### Irritation/Corrosion



### SECTION 11: Toxicological information

| Product/ingredient name                     | Result                      | Species | Score | Exposure                             |
|---|-----------------------------|---------|-------|--------------------------------------|
| Copper (I) oxide                            | Eyes - Irritant             | Rabbit  | -     | -                                    |
|   | Eyes - Severe irritant      | Rabbit  | -     | 24 hours 5 milligrams                |
| xylene                                      | Skin - Irritant             | Rabbit  | -     | -                                    |
|   | Skin - Moderate irritant    | Rabbit  | -     | 24 hours 500 milligrams              |
| zinc oxide                                  | Eyes - Mild irritant        | Rabbit  | -     | 24 hours 500 milligrams              |
|   | Skin - Mild irritant        | Rabbit  | -     | 24 hours 500 milligrams              |
| ethylbenzene                                | Eyes - Mild irritant        | Rabbit  | -     | -                                    |
|   | Respiratory - Mild irritant | Rabbit  | -     | -                                    |
|   | Skin - Mild irritant        | Rabbit  | -     | 24 hours 15 milligrams               |
| C10 aromatics hydrocarbons, <1% naphthalene | Skin - Mild irritant        | Rabbit  | -     | 24 hours 500 microliters             |
|   | Eyes - Moderate irritant    | Rabbit  | -     | 24 hours 100 microliters             |
| 4-methylpentan-2-one                        | Skin - Mild irritant        | Rabbit  | -     | 24 hours 500 milligrams              |
|   | Eyes - Severe irritant      | Rabbit  | -     | 24 hours 2 milligrams                |
| butan-1-ol                                  | Skin - Moderate irritant    | Rabbit  | -     | 24 hours 20 milligrams               |
|   | Eyes - Mild irritant        | Rabbit  | -     | 0.5 minutes 100 milligrams           |
| toluene                                     | Skin - Moderate irritant    | Rabbit  | -     | 24 hours 20 milligrams               |
|   | Eyes - Severe irritant      | Rabbit  | -     | 24 hours 750 Micrograms              |
| formaldehyde                                | Skin - Mild irritant        | Human   | -     | 72 hours 150 Micrograms Intermittent |
|   | Skin - Moderate irritant    | Rabbit  | -     | 24 hours 50 milligrams               |
|   | Skin - Severe irritant      | Rabbit  | -     | 20 hours                             |

#### Sensitizer

| Product/ingredient name       | Route of exposure | Species    | Result      |
|-------------------------------|-------------------|------------|-------------|
| 2,5-di-tert-butylhydroquinone | skin              | Mouse      | Sensitizing |
|                               | skin              | Guinea pig | Sensitizing |
|                               | skin              | Mouse      | Sensitizing |

#### Mutagenic effects

No known significant effects or critical hazards.

#### Carcinogenicity

Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

#### Reproductive toxicity

No known significant effects or critical hazards.

#### Teratogenic effects

Suspected of damaging the unborn child.

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

| Product/ingredient name                     | Category   | Route of exposure | Target organs                |
|---|------------|-------------------|------------------------------|
| zineb (ISO)                                 | Category 3 |                   | Respiratory tract irritation |
| C10 aromatics hydrocarbons, <1% naphthalene | Category 3 |                   | Narcotic effects             |
| 4-methylpentan-2-one                        | Category 3 |                   | Narcotic effects             |
| butan-1-ol                                  | Category 3 |                   | Respiratory tract irritation |
| 2,5-di-tert-butylhydroquinone               | Category 3 |                   | Narcotic effects             |
| toluene                                     | 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 |
| toluene                 | Category 2 | -                 | -              |

#### Aspiration hazard

| Product/ingredient name                     | Result                         |
|---|--------------------------------|
| ethylbenzene                                | ASPIRATION HAZARD - Category 1 |
| C10 aromatics hydrocarbons, <1% naphthalene | ASPIRATION HAZARD - Category 1 |
| toluene                                     | ASPIRATION HAZARD - Category 1 |

#### Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

#### Potential chronic health effects

Sensitization : Contains rosin, zineb (ISO). May produce an allergic reaction.

### SECTION 11: Toxicological information

#### 11.2 Information on other hazards

Endocrine disrupting properties : See Section 15 for details.

Other information : No additional known significant effects or critical hazards.

### SECTION 12: Ecological information

#### 12.1 Toxicity

Do not allow to enter drains or watercourses. Very toxic to aquatic life with long lasting effects.

| Product/ingredient name       | Result                                     | Species  | Exposure |
|-------------------------------|--|--|----------|
| copper (I) oxide              | Acute EC50 65 mg/l                         | Algae  | 96 hours |
|                               | Acute EC50 0.51 mg/l                       | Daphnia - Daphnia Magna  | 48 hours |
| rosin                         | Acute LC50 0.0081 mg/l                     | Fish - Pimephales promelas   | 96 hours |
|                               | Acute EC50 >1000 mg/l                      | Algae  | 72 hours |
| zinc oxide                    | Acute EC50 911 mg/l                        | Daphnia  | 48 hours |
|                               | Acute LC50 >1000 mg/l                      | Fish   | 96 hours |
|                               | EC50 0.413 mg/l                            | Daphnia  | 48 hours |
|                               | LC50 0.1169 mg/l                           | Fish   | 96 hours |
| zineb (ISO)                   | Acute EC50 0.17 mg/l                       | Algae - Pseudokirchneriella subcapitata - Exponential growth phase   | 72 hours |
|                               | Acute EC50 1 mg/l                          | Daphnia - Pseudokirchneriella subcapitata - Exponential growth phase | 48 hours |
|                               | Acute LC50 24600 µg/l Fresh water          | Daphnia - Daphnia magna - Neonate                                    | 48 hours |
|                               | Chronic EC50 0.136 mg/l                    | Algae  | 72 hours |
|                               | Acute EC50 0.036 mg/l                      | Algae  | 72 hours |
|                               | Acute LC50 970 - 1800 µg/l Fresh water     | Daphnia - Daphnia magna  | 48 hours |
| ethylbenzene                  | Acute LC50 7200 - 10300 µg/l Fresh water   | Fish - Poecilia reticulata   | 96 hours |
|                               | Chronic NOEC 0.05 mg/l Fresh water         | Algae - Chlorella vulgaris   | 96 hours |
| 4-methylpentan-2-one          | Chronic NOEC <1000 µg/l Fresh water        | Algae - Pseudokirchneriella subcapitata                              | 96 hours |
|                               | Chronic NOEC 7800 - 39000 µg/l Fresh water | Daphnia - Daphnia magna  | 21 days  |
| butan-1-ol                    | Chronic NOEC 168 mg/l Fresh water          | Fish - Pimephales promelas - Embryo                                  | 33 days  |
|                               | Acute EC50 1328 mg/l                       | Daphnia  | 96 hours |
| 2,5-di-tert-butylhydroquinone | Acute LC50 1.376 mg/l                      | Fish   | 96 hours |
|                               | Acute EC50 0.038 mg/l                      | Algae  | 72 hours |
| toluene                       | Acute EC50 0.4 mg/l                        | Daphnia  | 48 hours |
|                               | Chronic NOEC <500000 µg/l Fresh water      | Algae - Pseudokirchneriella subcapitata                              | 96 hours |
| formaldehyde                  | Chronic NOEC 1000 µg/l Fresh water         | Daphnia - Daphnia magna  | 21 days  |
|                               | Chronic NOEC 0.438 mg/l Marine water       | Algae - Ulva pertusa   | 96 hours |

#### 12.2 Persistence and degradability

| Product/ingredient name                     | Test  | Result                          | Dose     | Inoculum |
|---|---|---------------------------------|----------|----------|
| rosin                                       | -   | 64 % - Not readily - 28 days    | -        | -        |
|   | OECD 301F Ready Biodegradability - Manometric Respirometry Test | 90 - 98 % - Readily - 28 days   | -        | -        |
| xylene                                      | -   | >60 % - Readily - 28 days       | -        | -        |
|   | -   | >70 % - Readily - 28 days       | -        | -        |
| ethylbenzene                                | OECD 301F Ready Biodegradability - Manometric Respirometry Test | 49.56 % - Not readily - 28 days | -        | -        |
|   | -   | -                               | -        | -        |
| C10 aromatics hydrocarbons, <1% naphthalene | -   | 84 % - 14 days                  | 100 mg/l | -        |
|   | OECD 301D Ready Biodegradability - Closed Bottle Test           | 92 % - 20 days                  | -        | -        |
| 4-methylpentan-2-one                        | -   | 100 % - Readily - 14 days       | -        | -        |
|   | OECD 301A Ready Biodegradability - DOC Die-Away Test            | 99 % - Readily - 28 days        | -        | -        |
| butan-1-ol                                  | -   | -                               | -        | -        |
|   | -   | -                               | -        | -        |
| toluene                                     | -   | -                               | -        | -        |
|   | -   | -                               | -        | -        |
| formaldehyde                                | -   | -                               | -        | -        |
|   | -   | -                               | -        | -        |

| Product/ingredient name                     | Aquatic half-life | Photolysis | Biodegradability |
|---|-------------------|------------|------------------|
| rosin                                       | -                 | -          | Not readily      |
| xylene                                      | -                 | -          | Readily          |
| zinc oxide                                  | -                 | -          | Not readily      |
| ethylbenzene                                | -                 | -          | Readily          |
| C10 aromatics hydrocarbons, <1% naphthalene | -                 | -          | Not readily      |
| 4-methylpentan-2-one                        | -                 | -          | Readily          |
| butan-1-ol                                  | -                 | -          | Readily          |
| toluene                                     | -                 | -          | Readily          |
| formaldehyde                                | -                 | -          | Readily          |

### SECTION 12: Ecological information

#### 12.3 Bioaccumulative potential

| Product/ingredient name                     | LogP <sub>ow</sub> | BCF        | Potential |
|---|--------------------|------------|-----------|
| o-sin                                       | 1.9 - 7.7          | 56.3       | low       |
| xylene                                      | 3.12               | 8.1 - 25.9 | low       |
| zinc oxide                                  | 2.2                | 60960      | high      |
| zineb (ISO)                                 | 1.3                | -          | low       |
| ethylbenzene                                | 3.6                | -          | low       |
| C10 aromatics hydrocarbons, <1% naphthalene | 2.8 - 6.5          | 99 - 5780  | high      |
| 4-methylpentan-2-one                        | 1.31               | 2          | low       |
| butan-1-ol                                  | 1                  | 3.16       | low       |
| 2,5-di-tert-butylhydroquinone               | 4.85               | 440        | low       |
| toluene                                     | 2.73               | 90         | low       |
| formaldehyde                                | 0.35               | 3          | low       |

#### 12.4 Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>) : No known data available in our database.

Mobility :

No known data available in our database.

#### 12.5 Results of PBT and vPvB assessment

| Product/ingredient name   | PBT | P | B | T | vPvB | vP | vB |
|---|-----|---|---|---|------|----|----|
| This mixture does not contain any substances that are assessed to be a PBT or a vPvB. |     |   |   |   |      |    |    |

#### 12.6 Endocrine disrupting properties

See Section 15 for details.

#### 12.7 Other adverse effects

No known significant effects or critical hazards.

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Residues of the product is listed as hazardous waste. Dispose of according to all state and local applicable regulations. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Spillage, remains, discarded clothes and similar should be discarded in a fireproof container.

European waste catalogue no. (EWC) is given below.





European waste catalogue (EWC) : 08 01 11\*

#### Packaging

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

### SECTION 14: Transport information

Transport may take place according to national regulation or ADR for transport by road, RID for transport by train, IMDG for transport by sea, IATA for transport by air.

|                      | 14.1<br>UN / ID no. | 14.2<br>Proper shipping name | 14.3<br>Transport hazard class(es)  | 14.4<br>PG* | 14.5<br>Env* Additional information   |
|----------------------|---------------------|------------------------------|---|-------------|---|
| <b>ADR/RID Class</b> | UN1263              | PAINT                        | 3<br><br> | III         | Yes. The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.<br><b>Tunnel code</b> (D/E) |
| <b>IMDG Class</b>    | UN1263              | PAINT. (copper (I) oxide)    | 3<br><br> | III         | Yes. The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.<br><b>Emergency schedules</b><br>F-E, S-E      |

### SECTION 14: Transport information

|                   |              |   |   |     |   |
|-------------------|--------------|---|---|-----|---|
| <b>IATA Class</b> | UN1263 PAINT | 3 |  | III | Yes. The environmentally hazardous substance mark may appear if required by other transportation regulations. |
|-------------------|--------------|---|---|-----|---|

PG\* : Packing group  
Env.\* : Environmental hazards

#### 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 Maritime transport in bulk according to IMO instruments

Not applicable.

### SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorization - Substances of very high concern

##### Annex XIV

None of the components are listed.

##### Substances of very high concern

None of the components are listed.

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

Not applicable.

##### Other EU regulations

##### Prior Informed Consent (PIC) (649/2012/EU)

| Product/ingredient name | Annex            | Status |
|-------------------------|------------------|--------|
| zineb (ISO)             | Annex I - Part 1 | Listed |

**Seveso category** This product is controlled under the Seveso III Directive.

| Seveso category  |
|--|
| P5c: Flammable liquids 2 and 3 not falling under P5a or P5b<br>E1: Hazardous to the aquatic environment - Acute 1 or Chronic 1 |

#### Biocidal Products Regulations

Restrictions on use. : Product is not intended for consumer use.  
 Directions for use and dose rate : Spray or Roller application or brushing  
 Dose: See separate Product Data Sheet, Application instructions or label.  
 Additional information : (Product Type: 21 - Antifouling products) Liquid. Wear suitable protective clothing, gloves and eye/face protection. In case of contact with eyes, rinse immediately with plenty of water. If swallowed, seek medical advice immediately and show this container or label. This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/safety data sheet.

#### International regulations

##### IMO Anti-fouling System Convention Compliant (AFS/CONF/26)

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 October 2001 (IMO document AFS/CONF/26)

Product type : antifouling paint self polishing  
 Manufacturer : Hempel A/S  
 Product name and/or code : Hempel's Antifouling Atlantic+

7385051110

Colour : Brown.

Note: This name is shown on the product container. All products in HEMPEL's containers carrying this name comply with the IMO Convention (AFS/CONF/26).

Active ingredient(s) : copper (I) oxide 1317-39-1  
 zineb (ISO) 12122-67-7

### SECTION 15: Regulatory information

#### 15.2 Chemical Safety Assessment

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

### SECTION 16: Other information

Abbreviations and acronyms :

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

Full text of abbreviated H statements :

H225 Highly flammable liquid and vapor.  
 H226 Flammable liquid and vapor.  
 H228 Flammable solid.  
 H301 Toxic if swallowed.  
 H302 Harmful if swallowed.  
 H304 May be fatal if swallowed and enters airways.  
 H311 Toxic in contact with skin.  
 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.  
 H330 Fatal if inhaled.  
 H332 Harmful if inhaled.  
 H335 May cause respiratory irritation.  
 H336 May cause drowsiness or dizziness.  
 H341 Suspected of causing genetic defects.  
 H350 May cause cancer.  
 H351 Suspected of causing cancer.  
 H361d Suspected of damaging the unborn child.  
 H373 May cause damage to organs through prolonged or repeated exposure.  
 H400 Very toxic to aquatic life.  
 H410 Very toxic to aquatic life with long lasting effects.  
 H411 Toxic to aquatic life with long lasting effects.  
 EUH066 Repeated exposure may cause skin dryness or cracking.

Full text of classifications [CLP/GHS] :

Acute Tox. 2 ACUTE TOXICITY - Category 2  
 Acute Tox. 3 ACUTE TOXICITY - Category 3  
 Acute Tox. 4 ACUTE TOXICITY - Category 4  
 Aquatic Acute 1 AQUATIC HAZARD (ACUTE) - Category 1  
 Aquatic Chronic 1 AQUATIC HAZARD (LONG-TERM) - Category 1  
 Aquatic Chronic 2 AQUATIC HAZARD (LONG-TERM) - Category 2  
 Asp. Tox. 1 ASPIRATION HAZARD - Category 1  
 Carc. 1B CARCINOGENICITY - Category 1B  
 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  
 Muta. 2 GERM CELL MUTAGENICITY - Category 2  
 Repr. 2 TOXIC TO REPRODUCTION - Category 2  
 Skin Corr. 1B SKIN CORROSION/IRRITATION - Category 1B  
 Skin Irrit. 2 SKIN CORROSION/IRRITATION - Category 2  
 Skin Sens. 1 SKIN SENSITIZATION - Category 1  
 Skin Sens. 1B SKIN SENSITIZATION - Category 1B  
 STOT RE 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  
 STOT SE 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3

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

| Classification                     | Justification         |
|------------------------------------|-----------------------|
| FLAMMABLE LIQUIDS                  | On basis of test data |
| SKIN CORROSION/IRRITATION          | Calculation method    |
| SERIOUS EYE DAMAGE/ EYE IRRITATION | Calculation method    |
| SKIN SENSITIZATION                 | Calculation method    |
| CARCINOGENICITY                    | Calculation method    |
| TOXIC TO REPRODUCTION              | Calculation method    |
| AQUATIC HAZARD (ACUTE)             | Calculation method    |
| AQUATIC HAZARD (LONG-TERM)         | Calculation method    |

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### SECTION 16: Other information

#### Notice to reader

✔ Indicates information that has changed from previously issued version.

The information contained in this safety data sheet is based on the present state of knowledge and EU and national legislation. It provides guidance on health, safety and environmental aspects for handling the product in a safe way and should not be construed as any guarantee of the technical performance or suitability for particular applications.

It is always the duty of the user/employer to ascertain that the work is planned and carried out in accordance with the national regulations.