SAFETY DATA SHEET

Uni-Pro EU Navy

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

1.1 Product identifier
Product name: Uni-Pro EU Navy
Product code: YBB823
Product description: Consumer application of coatings
Professional application of coatings and inks

1.2 Relevant identified uses of the substance or mixture and uses advised against
Not applicable.

1.3 Details of the supplier of the safety data sheet
International Paint Ltd.
Stoneygate Lane
Felling
Gateshead
Tyne and Wear
NE10 0JY UK
Tel: +44 (0)191 469 6111 Fax: +44 (0)191 438 3711
e-mail address of person responsible for this SDS
sdsfellinguk@akzonobel.com

1.4 Emergency telephone number
National advisory body/Poison Centre (For use only by licensed medical professionals.)
Telephone number: +44 (0)844 892 0111
Supplier
Telephone number: +44 (0)191 469 6111 (24H)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Product definition: Mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]
Flam. Liq. 3, H226
Acute Tox. 4, H302
Skin Sens. 1, H317
Aquatic Acute 1, H400
Aquatic Chronic 1, H410
The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.
Classification according to Directive 1999/45/EC [DPD]
The product is classified as dangerous according to Directive 1999/45/EC and its amendments.
Classification: R10
Xn; R22
R43
N; R50/53
Physical/chemical hazards: Flammable.
Human health hazards: Harmful if swallowed. May cause sensitisation by skin contact.
Environmental hazards: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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SECTION 2: Hazards identification

See Section 16 for the full text of the R phrases or H statements declared above.
See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms:

- Flammable liquid and vapour
- Harmful
- Caution: May cause an allergic skin reaction
- Very toxic to aquatic life with long lasting effects

Signal word: Warning

Hazard statements:
- Flammable liquid and vapour.
- Harmful if swallowed.
- May cause an allergic skin reaction.
- Very toxic to aquatic life with long lasting effects.

Precautionary statements

General: Keep out of reach of children. Do not handle until all safety precautions have been read and understood.

Prevention: Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Do not breathe dust/fume/gas/mist/vapours/spray. Wear protective gloves and eye/face protection. In case of inadequate ventilation wear respiratory protection.

Response: IF SWALLOWED: Do NOT induce vomiting. Get immediate medical attention. IF ON SKIN: Wash with plenty of soap and water. Do not use solvents or thinners to clean the skin. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF INHALED: If not breathing, give artificial respiration. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Give nothing by mouth. If skin irritation or rash occurs: Get medical advice/attention. Get medical advice/attention if you feel unwell. Collect spillage.

Storage: Store in a well-ventilated place. Keep container tightly closed in a cool place.

Disposal: Do not reuse container. Dispose of containers contaminated by the product in accordance with local or national legal provisions. Keep unnecessary and unprotected personnel from entering.

Hazardous ingredients:
- dicopper oxide
- rosin

Supplemental label elements:
- Wear appropriate respirator when ventilation is inadequate.

Annex XVII - Restrictions:
- Not applicable.

Biocidal products regulation

Active substances

<table>
<thead>
<tr>
<th>Ingredient name</th>
</tr>
</thead>
<tbody>
<tr>
<td>dicopper oxide</td>
</tr>
</tbody>
</table>

Authorisation number (UK):
- HSE No. 9344

Authorisation number (Malta):
- MSA 2011-02-08-B04a

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SECTION 2: Hazards identification

Authorisation number (Ireland): PSC No. 96450

Directions for use, frequency of application and dose rate
Theoretical Coverage: Airless Spray 5 m²/l @ 120 micron dft
Theoretical Coverage: Brush, Roller 10 m²/l @ 60 micron dft

Restrictions on use: For professional and amateur use.


Recommended Cleaner: Use Thinner No. 3 for cleaning of paint application equipment.

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures: Mixture

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Identifiers</th>
<th>% by weight</th>
<th>Classification</th>
<th>Regulation (EC) No. 1272/2008 [CLP] Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>xylene</td>
<td>REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9</td>
<td>&gt;=5 - &lt;10 R10 Xn; R20/21, R65 Xi; R36/37/38</td>
<td>67/548/EEC</td>
<td>Regulation (EC) No. 1272/2008 [CLP] Type</td>
</tr>
</tbody>
</table>

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SECTION 3: Composition/information on ingredients

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

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

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

SECTION 4: First aid measures

4.1 Description of first aid measures

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

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

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

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

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

**Protection of first-aiders**
No action shall be taken involving any personal risk or without suitable training. 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**: No known significant effects or critical hazards.
- **Inhalation**: Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- **Skin contact**: May cause an allergic skin reaction.
- **Ingestion**: Harmful if swallowed.

**Over-exposure signs/symptoms**
SECTION 4: First aid measures

**Eye contact**: No specific data.

**Inhalation**: Adverse symptoms may include the following:
- headache
- drowsiness/fatigue
- dizziness/vertigo
- muscle weakness
- unconsciousness

**Skin contact**: Adverse symptoms may include the following:
- irritation
- redness

**Ingestion**: No specific data.

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 data.

SECTION 5: Firefighting measures

5.1 Extinguishing media

**Suitable extinguishing media**: Use dry chemical, CO₂, water spray (fog) or foam.

**Unsuitable extinguishing media**: Do not use water jet.

5.2 Special hazards arising from the substance or mixture

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

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

5.3 Advice for firefighters

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

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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel**: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spill material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
SECTION 6: Accidental release measures

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

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

6.3 Methods and materials for containment and cleaning up

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

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

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

SECTION 7: Handling and storage

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

7.1 Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. 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. Eliminate all ignition sources. Vapours are heavier than air and may spread along floors. Separate from oxidizing 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.

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SECTION 7: Handling and storage

7.3 Specific end use(s)

Recommendations: Not available.

Industrial sector specific solutions: Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker or exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Exposure limit values</th>
</tr>
</thead>
<tbody>
<tr>
<td>rosin</td>
<td>EH40/2005 WELs (United Kingdom (UK), 12/2011). Skin sensitiser.</td>
</tr>
<tr>
<td></td>
<td>STEL: 0.15 mg/m³ 15 minutes. Form: Fume</td>
</tr>
<tr>
<td></td>
<td>TWA: 0.05 mg/m³ 8 hours. Form: Fume</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), light arom.</td>
<td>European Hydrocarbon Solvent Suppliers (CEFIC-HSPA) methodology (Europe).</td>
</tr>
<tr>
<td></td>
<td>TWA: 100 mg/m³ 8 hours.</td>
</tr>
<tr>
<td></td>
<td>: 100 mg/m³</td>
</tr>
<tr>
<td></td>
<td>: 19 ppm</td>
</tr>
<tr>
<td></td>
<td>STEL: 441 mg/m³ 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>STEL: 100 ppm 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>TWA: 220 mg/m³ 8 hours.</td>
</tr>
<tr>
<td></td>
<td>TWA: 50 ppm 8 hours.</td>
</tr>
<tr>
<td></td>
<td>STEL: 552 mg/m³ 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>STEL: 125 ppm 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>TWA: 441 mg/m³ 8 hours.</td>
</tr>
<tr>
<td></td>
<td>TWA: 100 ppm 8 hours.</td>
</tr>
</tbody>
</table>

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

DNELs/DMELs

No DNELs/DMELs available.

PNECs

No PNECs available

8.2 Exposure controls

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SECTION 8: Exposure controls/personal protection

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

**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 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: safety glasses with side-shields.

**Skin protection**

**Hand protection**
- Use chemical resistant gloves classified under Standard EN 374: Protective gloves against chemicals and micro-organisms. Recommended: Viton® or Nitrile gloves. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. 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. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

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

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

**Respiratory protection**
- 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.

**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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td></td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid.</td>
</tr>
<tr>
<td>Colour</td>
<td>Blue.</td>
</tr>
<tr>
<td>Odour</td>
<td>Solvent.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>Lowest known value: 166°C (330.8°F) (Solvent naphtha (petroleum), light arom.).</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>Closed cup: 39.5°C</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Greatest known range: Lower: 0.8% Upper: 7% (Solvent naphtha (petroleum), light arom.)</td>
</tr>
<tr>
<td><strong>Vapour pressure</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Vapour density</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>1.77</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Insoluble in the following materials: cold water.</td>
</tr>
<tr>
<td><strong>Partition coefficient: n-octanol/water</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td>Kinematic (room temperature): 161 mm²/s</td>
</tr>
<tr>
<td><strong>Explosive properties</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Oxidising properties</strong></td>
<td>Not available.</td>
</tr>
</tbody>
</table>

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

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

10.2 Chemical stability: The product is stable.

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

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

10.5 Incompatible materials: Reactive or incompatible with the following materials: oxidizing materials

10.6 Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
### 11.1 Information on toxicological effects

#### Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>dicopper oxide</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>470 mg/kg</td>
<td></td>
</tr>
<tr>
<td>rosin</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>7600 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), light arom.</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>8400 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>xylene</td>
<td>LC50 Inhalation Gas.</td>
<td>Rat</td>
<td>5000 ppm</td>
<td>4 hours</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>LC50 Inhalation Gas.</td>
<td>Rat</td>
<td>4300 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>4000 ppm</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rabbit</td>
<td>17800 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rat</td>
<td>3500 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

**Conclusion/Summary**: Not available.

#### Acute toxicity estimates

<table>
<thead>
<tr>
<th>Route</th>
<th>ATE value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>1502.6 mg/kg</td>
</tr>
<tr>
<td>Dermal</td>
<td>17741 mg/kg</td>
</tr>
<tr>
<td>Inhalation (gases)</td>
<td>80641 ppm</td>
</tr>
<tr>
<td>Inhalation (vapours)</td>
<td>709.6 mg/l</td>
</tr>
</tbody>
</table>

#### Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solvent naphtha (petroleum), light arom.</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 100 microliters</td>
<td>-</td>
</tr>
<tr>
<td>zinc oxide</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>xylene</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>87 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 5 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rat</td>
<td>-</td>
<td>8 hours 60 microliters</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>Skin - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>100 Percent</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 15 milligrams</td>
<td>-</td>
</tr>
</tbody>
</table>

**Conclusion/Summary**: Not available.

#### Sensitisation

**Conclusion/Summary**: Not available.

#### Mutagenicity

**Conclusion/Summary**: Not available.

#### Carcinogenicity

**Conclusion/Summary**: Not available.

#### Reproductive toxicity

**Conclusion/Summary**: Not available.

#### Teratogenicity

**Conclusion/Summary**: Not available.

#### Specific target organ toxicity (single exposure)
SECTION 11: Toxicological information

Potential chronic health effects

Inhalation:
Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Harmful if swallowed.

Skin contact:
May cause an allergic skin reaction.

Specific target organ toxicity (repeated exposure)

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solvent naphtha (petroleum), light arom.</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Respiratory tract irritation and Narcotic effects</td>
</tr>
<tr>
<td>xylene</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Respiratory tract irritation</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Respiratory tract irritation</td>
</tr>
</tbody>
</table>

Information on the likely routes of exposure

Potential acute health effects

Eye contact: No known significant effects or critical hazards.
Inhalation: Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Skin contact: May cause an allergic skin reaction.
Ingestion: Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: No specific data.
Inhalation:
Adverse symptoms may include the following:
- headache
- drowsiness/fatigue
- dizziness/vertigo
- muscle weakness
- unconsciousness

Skin contact: Adverse symptoms may include the following:
- irritation
- redness

Ingestion: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects: Not available.
Potential delayed effects: Not available.

Long term exposure

Potential immediate effects: Not available.
Potential delayed effects: Not available.
SECTION 11: Toxicological information

Not available.

Conclusion/Summary : Not available.

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

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Acute EC50 0.042 mg/l Fresh water</th>
<th>Acute IC50 0.71 mg/l Fresh water</th>
<th>Acute LC50 0.075 mg/l Fresh water</th>
<th>Chronic IC10 0.009 mg/l Fresh water</th>
<th>Daphnia - Daphnia similis</th>
<th>Algae - Pseudokirchneriella subcapitata - Exponential growth phase</th>
<th>Fish - Danio rerio</th>
<th>Algae - Pseudokirchneriella subcapitata - Exponential growth phase</th>
<th>48 hours</th>
<th>96 hours</th>
<th>96 hours</th>
<th>96 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solvent naphtha (petroleum), light arom.</td>
<td>Acute EC50 6.14 mg/m³</td>
<td>Acute LC50 9.22 mg/m³</td>
<td>Acute EC50 0.042 mg/l Fresh water</td>
<td>Daphnia</td>
<td>48 hours</td>
<td>96 hours</td>
<td>72 hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>zinc oxide</td>
<td>Acute EC50 24.6 mg/l</td>
<td>Acute EC50 1 mg/l Fresh water</td>
<td>Acute IC50 0.17 mg/l</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
<td>48 hours</td>
<td>72 hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute LC50 1.1 mg/l</td>
<td>Daphnia - Daphnia magna - Neonate</td>
<td>capricornutum</td>
<td>72 hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 0.017 mg/l Fresh water</td>
<td>Algae - Selenastrum - Exponential growth phase</td>
<td>Fish - Oncorhynchus Mykiss</td>
<td>72 hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>Acute EC50 3.6 mg/l Fresh water</td>
<td>Acute LC50 18.4 to 25.4 mg/l Fresh water</td>
<td>Acute LC50 5.1 to 5.7 mg/l Marine water</td>
<td>Algae - Pseudokirchneriella subcapitata</td>
<td>96 hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Aquatic half-life</th>
<th>Photolysis</th>
<th>Biodegradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethylbenzene</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
</tbody>
</table>

12.3 Bioaccumulative potential
SECTION 12: Ecological information

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP&lt;sub&gt; ow&lt;/sub&gt;</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>rosin</td>
<td>1.9 to 7.7</td>
<td>-</td>
<td>high</td>
</tr>
<tr>
<td>zinc oxide</td>
<td>-</td>
<td>60960</td>
<td>high</td>
</tr>
<tr>
<td>xylene</td>
<td>3.16</td>
<td>8.1 to 25.9</td>
<td>low</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>3.15</td>
<td>15</td>
<td>low</td>
</tr>
</tbody>
</table>

12.4 Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)**

: Not available.

Mobility

: Not available.

12.5 Results of PBT and vPvB assessment

**PBT**

: Not applicable.

**vPvB**

: Not applicable.

12.6 Other adverse effects

: No known significant effects or critical hazards.

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**

: The classification of the product may meet the criteria for a hazardous waste.

**European waste catalogue (EWC)**

<table>
<thead>
<tr>
<th>Code number</th>
<th>Waste designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>EWC 08 01 11*</td>
<td>waste paint and varnish containing organic solvents or other dangerous substances</td>
</tr>
</tbody>
</table>

**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.

**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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information
## SECTION 14: Transport information

<table>
<thead>
<tr>
<th></th>
<th>ADR/RID</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>14.1 UN number</strong></td>
<td>UN1263</td>
<td>UN1263</td>
<td>UN1263</td>
</tr>
<tr>
<td><strong>14.2 UN proper shipping name</strong></td>
<td>PAINT</td>
<td>PAINT. Marine pollutant (dicopper oxide)</td>
<td>PAINT</td>
</tr>
<tr>
<td><strong>14.3 Transport hazard class(es)</strong></td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>![Fire Symbol]</td>
<td>![Fish Symbol]</td>
<td>![Fire Symbol]</td>
</tr>
<tr>
<td><strong>14.4 Packing group</strong></td>
<td>III</td>
<td>III</td>
<td>III</td>
</tr>
<tr>
<td><strong>14.5 Environmental hazards</strong></td>
<td>Yes.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
<tr>
<td><strong>Additional information</strong></td>
<td>The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.</td>
<td>The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.</td>
<td>The environmentally hazardous substance mark may appear if required by other transportation regulations.</td>
</tr>
</tbody>
</table>

**IMDG Code Segregation group**: Not applicable.

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

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**: Not available.

## SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

**Annex XIV - List of substances subject to authorisation**

**Annex XIV**
None of the components are listed.

**Substances of very high concern**
None of the components are listed.
SECTION 15: Regulatory information

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

Not applicable.

Other EU regulations

Special packaging requirements

Containers to be fitted with child-resistant fastenings

Not applicable.

Tactile warning of danger

Yes, applicable.

IMO


Type (Antifouling)

Antifouling Type - Organotin-free ablative

National regulations

Biocidal products regulation

Product type

PT21 Antifouling products Liquid. Paint.

References

Biocidal Products Regulations 2012
The Aerosol Dispensers (EEC Requirements) (Amendment) Regulations 1996
The Detergents Regulations 2005

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
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
vPvB = Very Persistent and Very Bioaccumulative

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

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flam. Liq. 3, H226</td>
<td>On basis of test data</td>
</tr>
<tr>
<td>Acute Tox. 4, H302</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Skin Sens. 1, H317</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Aquatic Acute 1, H400</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Aquatic Chronic 1, H410</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

Full text of abbreviated H statements

| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H302 (oral) | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H312 (dermal) | Harmful in contact with skin. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H332 (inhalation) | Harmful if inhaled. |
| H335 (Respiratory tract irritation) | May cause respiratory irritation. (Respiratory tract irritation) |

Date of issue/Date of revision: 10/09/2015.

Version: 1
<table>
<thead>
<tr>
<th>Full text of classifications [CLP/GHS]</th>
<th>Full text of abbreviated R phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>H335 and H336 (Respiratory tract irritation and Narcotic effects)</td>
<td>R11- Highly flammable.</td>
</tr>
<tr>
<td>H373 (ears) (inhalation)</td>
<td>R10- Flammable.</td>
</tr>
<tr>
<td>H400</td>
<td>R20- Harmful by inhalation.</td>
</tr>
<tr>
<td>H410</td>
<td>R22- Harmful if swallowed.</td>
</tr>
<tr>
<td>H411</td>
<td>R20/21- Harmful by inhalation and in contact with skin.</td>
</tr>
<tr>
<td>Very toxic to aquatic life.</td>
<td>R48/20- Harmful: danger of serious damage to health by prolonged exposure through inhalation.</td>
</tr>
<tr>
<td>Very toxic to aquatic life with long lasting effects.</td>
<td>R65- Harmful: may cause lung damage if swallowed.</td>
</tr>
<tr>
<td>Toxic to aquatic life with long lasting effects.</td>
<td>R37- Irritating to respiratory system.</td>
</tr>
<tr>
<td>May cause damage to organs through prolonged or repeated exposure if inhaled. (ears)</td>
<td>R36/37/38- Irritating to eyes, respiratory system and skin.</td>
</tr>
<tr>
<td>May cause respiratory irritation. May cause drowsiness or dizziness. (Respiratory tract irritation and Narcotic effects)</td>
<td>R43- May cause sensitisation by skin contact.</td>
</tr>
<tr>
<td>Flammable liquids - Category 2</td>
<td>R66- Repeated exposure may cause skin dryness or cracking.</td>
</tr>
<tr>
<td>Flammable liquids - Category 3</td>
<td>R67- Vapours may cause drowsiness and dizziness.</td>
</tr>
<tr>
<td>Skin Sensitization - Category 1</td>
<td>R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</td>
</tr>
<tr>
<td>Hirsi irritation (Respiratory tract irritation and Narcotic effects)</td>
<td>R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</td>
</tr>
</tbody>
</table>

**Full text of classifications [DSD/DPD]**

- F - Highly flammable
- Xn - Harmful
- Xi - Irritant
- N - Dangerous for the environment

**Date of printing**: 10/09/2015.

**Date of issue/Date of revision**: 10/09/2015.

**Date of previous issue**: No previous validation.

**Version**: 1
SECTION 16: Other information

IMPORTANT NOTE: the information contained in this data sheet (as may be amended from time to time) is not intended to be exhaustive and is presented in good faith and believed to be correct as of the date on which it is prepared. It is the user’s responsibility to verify that this data sheet is current prior to using the product to which it relates.

Persons using the information must make their own determinations as to the suitability of the relevant product for their purposes prior to use. Where those purposes are other than as specifically recommended in this safety data sheet, then the user uses the product at their own risk.

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