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

1.1. Product identifier

<table>
<thead>
<tr>
<th>Product name</th>
<th>Astro IFV Varnish (Basecoat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product code</td>
<td>AFFPTIFV</td>
</tr>
</tbody>
</table>

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

| Use of substance / mixture | Resin component of Clear Fire Varnish. To be mixed with Fire Varnish Activator part A to produce a liquid air drying clear varnish for the coating of timber. Applied by brush, roller or spray For professional and industrial use only |

1.3. Details of the supplier of the safety data sheet

<table>
<thead>
<tr>
<th>Company name</th>
<th>Astroflame (Fire Seals) Ltd.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intumescent House</td>
</tr>
<tr>
<td></td>
<td>Unit 8</td>
</tr>
<tr>
<td></td>
<td>The Io Centre</td>
</tr>
<tr>
<td></td>
<td>Stephenson Road</td>
</tr>
<tr>
<td></td>
<td>Segensworth</td>
</tr>
<tr>
<td></td>
<td>Fareham</td>
</tr>
<tr>
<td></td>
<td>England</td>
</tr>
<tr>
<td></td>
<td>PO15 5RU</td>
</tr>
<tr>
<td>Tel</td>
<td>01329 844 500</td>
</tr>
<tr>
<td>Fax</td>
<td>01329 844 600</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:sales@astroflame.com">sales@astroflame.com</a></td>
</tr>
</tbody>
</table>

1.4. Emergency telephone number

| Emergency tel              | 01329 844 500 (office hours only) |

Section 2: Hazards identification

2.1. Classification of the substance or mixture

<table>
<thead>
<tr>
<th>Classification under CLP</th>
<th>Carc. 1B: H350; Skin Sens. 1: H317</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most important adverse effects</td>
<td>May cause an allergic skin reaction. May cause cancer route not known.</td>
</tr>
</tbody>
</table>

2.2. Label elements

<table>
<thead>
<tr>
<th>Label elements</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard statements</td>
<td>H317: May cause an allergic skin reaction.</td>
</tr>
<tr>
<td></td>
<td>H350: May cause cancer route not known.</td>
</tr>
<tr>
<td>Hazard pictograms</td>
<td>GHS07: Exclamation mark</td>
</tr>
<tr>
<td></td>
<td>GHS08: Health hazard</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signal words</th>
<th>Danger</th>
</tr>
</thead>
</table>
2.2. Label elements (continued)

Precautionary statements:

P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P302+352: IF ON SKIN: Wash with plenty of water.
P308+313: IF exposed or concerned: Get medical advice/attention.
P321: Specific treatment (see medical advice on this label).

2.3. Other hazards

Other hazards: Danger of serious damage to health by prolonged exposure.

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

METHANOL

<table>
<thead>
<tr>
<th>EINECS</th>
<th>CAS</th>
<th>PBT / WEL</th>
<th>CLP Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>200-659-6</td>
<td>67-56-1</td>
<td>-</td>
<td>Flam. Liq. 2: H225; Acute Tox. 3: H331; Acute Tox. 3: H311; Acute Tox. 3: H301; STOT SE 1: H370</td>
<td>&lt;1%</td>
</tr>
</tbody>
</table>

FORMALDEHYDE

<table>
<thead>
<tr>
<th>EINECS</th>
<th>CAS</th>
<th>PBT / WEL</th>
<th>CLP Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>200-001-8</td>
<td>50-00-0</td>
<td>-</td>
<td>Carc. 1B: H350; Muta. 2: H341; Acute Tox. 3: H301; Acute Tox. 3: H311; Acute Tox. 3: H331; Skin Corr. 1B: H314; Skin Sens. 1: H317</td>
<td>&lt;1%</td>
</tr>
</tbody>
</table>

Contains:

* Formaldehyde
methanol

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact:
Remove all contaminated clothes and footwear immediately unless stuck to skin. Consult a doctor. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin.

Eye contact:
Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion:
Wash out mouth with water. Consult a doctor.

Inhalation:
Remove casualty from exposure ensuring one’s own safety whilst doing so. Give nothing by mouth if unconscious and breathing is OK, place in the recovery position. Consult a doctor.
4.2. Most important symptoms and effects, both acute and delayed

Skin contact : There may be irritation and redness at the site of contact.
Eye contact : There may be irritation and redness. The eyes may water profusely.
Ingestion : There may be soreness and redness of the mouth and throat.
Inhalation : Exposure to organic solvent vapours in excess of stated occupational exposure limits may result in adverse health effects. There may be irritation of the throat. Exposure may cause coughing or wheezing.

Delayed / immediate effects : Exposure to organic solvent vapours in excess of the stated occupational exposure limit may result in adverse health effects. Repeated or prolonged contact with the product may cause removal of natural oils and fats from the skin.

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

Immediate / special treatment : In all cases of doubt, or when symptoms persist seek medical attention. Show this safety data sheet to the doctor in attendance.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media : Suitable extinguishing media for the surrounding fire should be used. Alcohol resistant foam. Carbon dioxide. Dry chemical powder. Water spray. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards : In the event of fire and/or explosion do NOT breathe fumes. In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters : Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes. Do not allow run off to enter watercourses or drains.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid. Evacuate the area immediately.

6.2. Environmental precautions

Environmental precautions : Do not discharge into drains or rivers. Contain the spillage using bunding. If the product enters drains or water courses, the local water company should be contacted immediately.

6.3. Methods and material for containment and cleaning up

Clean-up procedures : Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Clean-up should be dealt with only by qualified personnel familiar with the specific substance.
7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Avoid the formation or spread of mists in the air. Ensure there is sufficient ventilation of the area. Always wash your hands before eating, smoking or using the toilet. Smoking, eating and drinking should be prohibited in mixing and application area. In case of insufficient ventilation wear suitable respiratory protection.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Observe label precautions. Store in a cool, well ventilated area. Keep container tightly closed.

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): The identified uses of this product are detailed in section 1 refer to Application Instructions before using this product.

8.1. Control parameters

Hazardous ingredients: METHANOL

Workplace exposure limits: Respirable dust

<table>
<thead>
<tr>
<th>State</th>
<th>8 hour TWA</th>
<th>15 min. STEL</th>
<th>8 hour TWA</th>
<th>15 min. STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>266 mg/m3</td>
<td>333 mg/m3</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

FORMALDEHYDE...100% Respirable dust

| UK    | 2.5 mg/m3 | 2.5 mg/m3 | -          | -            |

DNEL/PNEC Values

Hazardous ingredients: METHANOL

<table>
<thead>
<tr>
<th>Type</th>
<th>Exposure</th>
<th>Value</th>
<th>Population</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNEL</td>
<td>Dermal</td>
<td>40 mg/kg/day</td>
<td>Workers</td>
<td>Systemic</td>
</tr>
<tr>
<td>DNEL</td>
<td>Inhalation</td>
<td>260 mg/m3</td>
<td>Workers</td>
<td>Systemic</td>
</tr>
<tr>
<td>DNEL</td>
<td>Inhalation</td>
<td>50 mg/m3</td>
<td>Consumers</td>
<td>Systemic</td>
</tr>
<tr>
<td>DNEL</td>
<td>Oral</td>
<td>8 mg/kg/day</td>
<td>Consumers</td>
<td>Systemic</td>
</tr>
<tr>
<td>PNEC</td>
<td>Fresh water</td>
<td>154 mg/l</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PNEC</td>
<td>Marine water</td>
<td>15.4 mg/l</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PNEC</td>
<td>Soil (agricultural)</td>
<td>23.5 mg/kg</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
8.2. Exposure controls

**Engineering measures**: Ensure there is sufficient ventilation of the area, where practical by use of local exhaust ventilation.

**Respiratory protection**: Self-contained breathing apparatus must be available in case of emergency. Respiratory protection must be used if the general level exceeds the recommended occupational exposure limit. Air-fed mask fitted with appropriate filters must be used when spraying.

**Hand protection**: Impermeable gloves. The instructions and information provided by the glove manufacturer on use, storage, maintenance, and replacement must be followed.

**Eye protection**: Safety glasses. Manufactured and tested to EN 166 and designed to protect against splashes. Ensure eye bath is to hand.

**Skin protection**: Impermeable protective clothing.

**Environmental**: Handle in accordance with good industrial hygiene and safety practices. Prevent from entering in public sewers or the immediate environment.

---

### DNEL/PNEC Values (continued)

<table>
<thead>
<tr>
<th>Type</th>
<th>Exposure</th>
<th>Value</th>
<th>Population</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>PNEC</td>
<td>Fresh water sediments</td>
<td>77 mg/kg</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PNEC</td>
<td>Marine sediments</td>
<td>7.7 mg/kg</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### FORMALDEHYDE...100%

<table>
<thead>
<tr>
<th>Type</th>
<th>Exposure</th>
<th>Value</th>
<th>Population</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNEL</td>
<td>Inhalation</td>
<td>9 mg/m³</td>
<td>Workers</td>
<td>Systemic</td>
</tr>
<tr>
<td>DNEL</td>
<td>Inhalation</td>
<td>0.5 mg/m³</td>
<td>Workers</td>
<td>Local</td>
</tr>
<tr>
<td>DNEL</td>
<td>Inhalation</td>
<td>1 mg/m³</td>
<td>Workers</td>
<td>Local</td>
</tr>
<tr>
<td>DNEL</td>
<td>Dermal</td>
<td>250 mg/kg/day</td>
<td>Workers</td>
<td>Systemic</td>
</tr>
<tr>
<td>DNEL</td>
<td>Dermal</td>
<td>37 ug/m²</td>
<td>Workers</td>
<td>Local</td>
</tr>
<tr>
<td>DNEL</td>
<td>Inhalation</td>
<td>3.2 mg/m³</td>
<td>Consumers</td>
<td>Systemic</td>
</tr>
<tr>
<td>DNEL</td>
<td>Dermal</td>
<td>102 mg/kg/day</td>
<td>Consumers</td>
<td>Local</td>
</tr>
<tr>
<td>DNEL</td>
<td>Dermal</td>
<td>12 ug/m²</td>
<td>Consumers</td>
<td>Local</td>
</tr>
<tr>
<td>DNEL</td>
<td>Oral</td>
<td>4.1 mg/m³</td>
<td>Consumers</td>
<td>Systemic</td>
</tr>
<tr>
<td>PNEC</td>
<td>Fresh water</td>
<td>0.47 mg/l</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PNEC</td>
<td>Marine water</td>
<td>0.47 mg/l</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PNEC</td>
<td>Fresh water sediments</td>
<td>2.44 mg/kg</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PNEC</td>
<td>Marine sediments</td>
<td>2.44 mg/kg</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PNEC</td>
<td>Soil (agricultural)</td>
<td>0.21 mg/kg</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
**Section 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

- **State:** Liquid
- **Colour:** water-white
- **Odour:** formaldehyde-like
- **Evaporation rate:** No data available.
- **Oxidising:** No data available.
- **Solubility in water:** Miscible
- **Viscosity:** Viscous
- **Kinematic viscosity:** 5.5-7.5 p
- **Viscosity test method:** rotothinner@20°C
- **Boiling point/range°C:** 100°C
- **Flammability limits %: lower:** No data available.  
- **Melting point/range°C:** Not applicable.
- **Flash point°C:** Not applicable.  
- **upper:** No data available.
- **Autoflammability°C:** No data available.  
- **Part.coef. n-octanol/water:** No data available.
- **Relative density:** 1.2-1.3
- **Vapour pressure:** No data available.
- **VOC g/l:** 26 g/l
- **pH:** Approx. 8.5-9.5

**9.2. Other information**

Other information: Please read information on the labels before using. Refer to Fire Varnish Application instructions before using. Pot life when mixed approximately 2 hours dependant on Temperature, Humidity and season of the year.

**Section 10: Stability and reactivity**

**10.1. Reactivity**

- **Reactivity:** Stable under recommended transport or storage conditions.

**10.2. Chemical stability**

- **Chemical stability:** Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

- **Hazardous reactions:** Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

**10.4. Conditions to avoid**

- **Conditions to avoid:** Heat. Hot surfaces. Flames.

**10.5. Incompatible materials**

- **Materials to avoid:** Strong oxidising agents. Strong acids.

**10.6. Hazardous decomposition products**

- **Haz. decomp. products:** In combustion emits toxic fumes.
Section 11: Toxicological information

11.1. Information on toxicological effects

Toxicity values:

<table>
<thead>
<tr>
<th>Route</th>
<th>Species</th>
<th>Test</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAPOURS</td>
<td>MUS</td>
<td>4H LC50</td>
<td>43.68</td>
<td>mg/l</td>
</tr>
<tr>
<td>DERMAL</td>
<td>RBT</td>
<td>LD50</td>
<td>17100</td>
<td>mg/kg</td>
</tr>
<tr>
<td>ORAL</td>
<td>MUS</td>
<td>LD50</td>
<td>7000</td>
<td>mg/kg</td>
</tr>
</tbody>
</table>

Hazardous ingredients:

METHANOL

<table>
<thead>
<tr>
<th>IVN</th>
<th>RAT</th>
<th>LD50</th>
<th>2131</th>
<th>mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORL</td>
<td>MUS</td>
<td>LD50</td>
<td>7300</td>
<td>mg/kg</td>
</tr>
<tr>
<td>ORL</td>
<td>RAT</td>
<td>LD50</td>
<td>5628</td>
<td>mg/kg</td>
</tr>
</tbody>
</table>

FORMALDEHYDE...100%

<table>
<thead>
<tr>
<th>ORL</th>
<th>MUS</th>
<th>LD50</th>
<th>42</th>
<th>mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORL</td>
<td>RAT</td>
<td>LD50</td>
<td>100</td>
<td>mg/kg</td>
</tr>
<tr>
<td>SCU</td>
<td>RAT</td>
<td>LD50</td>
<td>420</td>
<td>mg/kg</td>
</tr>
</tbody>
</table>

Relevant hazards for product:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Route</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory/skin sensitisation</td>
<td>DRM</td>
<td>Hazardous: calculated</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>--</td>
<td>Hazardous: calculated</td>
</tr>
</tbody>
</table>

Symptoms / routes of exposure

Skin contact : There may be irritation and redness at the site of contact.
Eye contact  : There may be irritation and redness. The eyes may water profusely.
Ingestion   : There may be soreness and redness of the mouth and throat.
Inhalation  : Exposure to organic solvent vapours in excess of stated occupational exposure limits may result in adverse health effects. There may be irritation of the throat. Exposure may cause coughing or wheezing.

Delayed / immediate effects : Exposure to organic solvent vapours in excess of the stated occupational exposure limit may result in adverse health effects. Repeated or prolonged contact with the product may cause removal of natural oils and fats from the skin.

Other information : Repeated or Prolonged contact with the product may lead to the removal of natural fats from the skin, resulting non allergic contact dermatitis and absorption through the skin. Formaldehyde is released during curing. It is irritating to the mucous membranes and may cause skin sensitisation. In all cases of doubt or where symptoms persist obtain medical attention.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values : No data available.
12.2. Persistence and degradability

Persistence and degradability : Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential : No bioaccumulation potential.

12.4. Mobility in soil

Mobility : Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification : This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects : Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations : Transfer to a suitable container and arrange for collection by specialised disposal company.

Waste code number : 08 01 12

Disposal of packaging : Drained and rigorously scraped out empty containers are controlled wastes and should be disposed of according with the regulations made under the Control of Pollution Act and Environmental Protection Act

NB : The user’s attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

Transport class : This product does not require a classification for transport.
### Section 15: Regulatory information

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


#### 15.2. Chemical Safety Assessment

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

### Section 16: Other information

**Other information:**

This safety data sheet is prepared in accordance with Commission Regulation (EC) No 1272/2008.

* indicates text in the SDS which has changed since the last revision.

**Phrases used in s.2 and s.3:**

- H225: Highly flammable liquid and vapour.
- H301: Toxic if swallowed.
- H311: Toxic in contact with skin.
- H314: Causes severe skin burns and eye damage.
- H317: May cause an allergic skin reaction.
- H331: Toxic if inhaled.
- H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
- H350: May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
- H370: Causes damage to organs <or state all organs affected, if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.
Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Astro Varnish (Activator NG)
Product code : AFFPTIFV/ACT

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

Use of substance / mixture : Acid catalyst to be mixed with Fire varnish base NG

1.3. Details of the supplier of the safety data sheet

Company name : Astroflame (Fire Seals) Ltd.
Intumescent House
Unit 8
The Io Centre
Stephenson Road
Segensworth
 Fareham
England
PO15 5RU
Tel : 01329 844 500
Fax : 01329 844 600
Email : sales@astroflame.com

1.4. Emergency telephone number

Emergency tel : 01329 844 500 (office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP : Skin Corr. 1B: H314; Met. Corr. 1: H290; Skin Irrit. 2: H315; Eye Dam. 1: H318

Most important adverse effects: May be corrosive to metals. Causes skin irritation. Causes serious eye damage.

2.2. Label elements

Label elements : 
Hazard statements : H290: May be corrosive to metals. H315: Causes skin irritation. H318: Causes serious eye damage.
Hazard pictograms : GHS05: Corrosion
Signal words : Danger
### 2.2. Label elements (continued)

**Precautionary statements**

- **P260:** Do not breathe dust/fumes/gas/mist/vapours/spray.
- **P280:** Wear protective gloves/protective clothing/eye protection/face protection.
- **P303+361+353:** IF ON SKIN (or hair): Take off immediately all contaminated clothing.
  - Rinse skin with water/shower.
- **P304+340:** IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- **P305+351+338:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- **P333+313:** If skin irritation or rash occurs: Get medical advice/attention.
- **P234:** Keep only in original container.
- **P390:** Absorb spillage to prevent material damage.
- **P406:** Store in corrosive resistant container with a resistant inner liner.
- **P264:** Wash hands thoroughly after handling.
- **P310:** Immediately call a for instructions/advice.

### 2.3. Other hazards

**PBT**

This product is not identified as a PBT/vPvB substance.

### 3.2. Mixtures

**Hazardous ingredients:**

**PHOSPHORIC ACID PROPYL ESTER**

<table>
<thead>
<tr>
<th>EINECS</th>
<th>CAS</th>
<th>PBT / WEL</th>
<th>CLP Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>145441-41-4</td>
<td>-</td>
<td>Met. Corr. 1: H290; Skin Irrit. 2:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>H315; Eye Dam. 1: H318</td>
<td>30-50%</td>
</tr>
</tbody>
</table>

**ALUMINIUM TRIS(DIHYDROGEN PHOSPHATE) - REACH registered number(s): 01-2119490078-32-0000**

<table>
<thead>
<tr>
<th>EINECS</th>
<th>CAS</th>
<th>PBT / WEL</th>
<th>Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>13530-50-2</td>
<td>-</td>
<td>Eye Dam. 1: H318</td>
<td>10-30%</td>
</tr>
</tbody>
</table>

**2-PHENOXYETHANOL**

<table>
<thead>
<tr>
<th>EINECS</th>
<th>CAS</th>
<th>PBT / WEL</th>
<th>Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>204-589-7</td>
<td>122-99-6</td>
<td>-</td>
<td>Acute Tox. 4: H302; Eye Irrit. 2: H319</td>
<td>1-10%</td>
</tr>
</tbody>
</table>

**ORTHOPHOSPHORIC ACID**

<table>
<thead>
<tr>
<th>EINECS</th>
<th>CAS</th>
<th>PBT / WEL</th>
<th>Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>231-633-2</td>
<td>7664-38-2</td>
<td>-</td>
<td>Skin Corr. 1B: H314</td>
<td>1-10%</td>
</tr>
</tbody>
</table>
3.2. Mixtures (continued)

Non-classified ingredients:

**TROYSOL LAC**

<table>
<thead>
<tr>
<th>EINECS</th>
<th>CAS</th>
<th>PBT / WEL</th>
<th>CLP Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>452-570-9</td>
<td>-</td>
<td>-</td>
<td>Skin Irrit. 2: H315; Aquatic Chronic 2: H411; Eye Dam. 1: H318; STOT RE 2: H373</td>
<td>&lt;1%</td>
</tr>
</tbody>
</table>

Contains: aluminum tris(dihydrogen phosphate)  
phosphoric acid propyl ester

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

Eye contact: Bathe the eye with running water for 15 minutes. Seek immediate medical advice.

Ingestion: Wash out mouth with water. Do not induce vomiting. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Obtain immediate medical attention.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. May cause irritation of the respiratory system. Keep the patient warm and at rest. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: Irritation or pain may occur at the site of contact. Blisters may occur.

Eye contact: Splashes in the eye. May cause permanent damage.

Ingestion: Corrosive burns may appear around the lips. Corrosive - even small amounts can cause serious damage.

Inhalation: There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

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

Immediate / special treatment: Eye bathing equipment should be available on the premises. Show this safety data sheet to the doctor in attendance.
Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media : Suitable extinguishing media for the surrounding fire should be used. Carbon dioxide. Alcohol resistant foam. Dry chemical powder. Water fog. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards : Corrosive. In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters : Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes. Do not allow run off to enter watercourses or drains

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Avoid breathing any vapours. Ventilate the area. Exclude all non essential personnel. Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions

Environmental precautions : Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures : Absorb into dry earth or sand. Remove mechanically. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Neutralise residue with soda and rinse with plenty of water.

6.4. Reference to other sections

Reference to other sections : Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements : Avoid direct contact with the substance. Wear protective gloves, eye and face protection. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Smoking, eating and drinking should be prohibited in mixing and application area. Avoid direct contact with the substance. Avoid the formation or spread of mists in the air. Always wash your hands before eating, smoking or using the toilet.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a cool, well ventilated area. Keep out of reach of children. Keep container tightly closed. Observe label precautions.

Suitable packaging : Must only be kept in original packaging.
7.3. Specific end use(s)

Specific end use(s) : the identified uses of this product are detailed in section 1 refer to Application Instructions before using this product Acid Component Part A for Use with Fire Varnish Resin Base Part B

Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients:

ALUMINIUM TRIS(DIHYDROGEN PHOSPHATE)

<table>
<thead>
<tr>
<th>Workplace exposure limits:</th>
<th>Respirable dust</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>8 hour TWA</td>
</tr>
<tr>
<td>EU</td>
<td>2 mg/m³</td>
</tr>
</tbody>
</table>

2-PHENOXYETHANOL

| UK | 110 mg/m³ | 110 mg/m³ | - | - |

ORTOPHOSPHORIC ACID...100%

| UK | 1 mg/m³ | 2 mg/m³ | - | - |

DNEL/PNEC Values

Hazardous ingredients:

ALUMINIUM TRIS(DIHYDROGEN PHOSPHATE)

<table>
<thead>
<tr>
<th>Type</th>
<th>Exposure</th>
<th>Value</th>
<th>Population</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNEL</td>
<td>Inhalation</td>
<td>4.07 mg/m³</td>
<td>Workers</td>
<td>Systemic</td>
</tr>
<tr>
<td>DNEL</td>
<td>Inhalation</td>
<td>3.04 mg/m³</td>
<td>Consumers</td>
<td>Systemic</td>
</tr>
<tr>
<td>PNEC</td>
<td>Fresh water</td>
<td>0.032725 mg/l</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PNEC</td>
<td>Marine water</td>
<td>0.0032725 mg/l</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

2-PHENOXYETHANOL

<table>
<thead>
<tr>
<th>Type</th>
<th>Exposure</th>
<th>Value</th>
<th>Population</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNEL</td>
<td>Dermal</td>
<td>34.72 mg/kg/day</td>
<td>Workers</td>
<td>Systemic</td>
</tr>
<tr>
<td>DNEL</td>
<td>Inhalation</td>
<td>8.07 mg/m³</td>
<td>Workers</td>
<td>Systemic</td>
</tr>
<tr>
<td>DNEL</td>
<td>Inhalation</td>
<td>8.07 mg/m³</td>
<td>Workers</td>
<td>Local</td>
</tr>
<tr>
<td>DNEL</td>
<td>Oral</td>
<td>17.43 mg/kg/day</td>
<td>Consumers</td>
<td>Systemic</td>
</tr>
<tr>
<td>DNEL</td>
<td>Dermal</td>
<td>20.83 mg/kg/day</td>
<td>Consumers</td>
<td>Systemic</td>
</tr>
<tr>
<td>DNEL</td>
<td>Inhalation</td>
<td>2.41 mg/m³</td>
<td>Consumers</td>
<td>Systemic</td>
</tr>
<tr>
<td>DNEL</td>
<td>Oral</td>
<td>17.43 mg/kg/day</td>
<td>Consumers</td>
<td>Systemic</td>
</tr>
<tr>
<td>DNEL</td>
<td>Inhalation</td>
<td>2.41 mg/m³</td>
<td>Consumers</td>
<td>Local</td>
</tr>
<tr>
<td>PNEC</td>
<td>Fresh water</td>
<td>0.943 mg/l</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PNEC</td>
<td>Marine water</td>
<td>0.094 mg/l</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PNEC</td>
<td>Fresh water sediments</td>
<td>7.23 mg/kg</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PNEC</td>
<td>Marine sediments</td>
<td>0.723 mg/kg</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PNEC</td>
<td>Soil (agricultural)</td>
<td>1.26 mg/kg</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
DNEL/PNEC Values (continued)

<table>
<thead>
<tr>
<th>Type</th>
<th>Exposure</th>
<th>Value</th>
<th>Population</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNEL</td>
<td>Inhalation</td>
<td>1 mg/m³</td>
<td>Workers</td>
<td>Local</td>
</tr>
<tr>
<td>DNEL</td>
<td>Dermal</td>
<td>-</td>
<td>Workers</td>
<td>Local</td>
</tr>
<tr>
<td>DNEL</td>
<td>Oral</td>
<td>-</td>
<td>Workers</td>
<td>Local</td>
</tr>
<tr>
<td>PNEC</td>
<td>Fresh water</td>
<td>0.032725 mg/l</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PNEC</td>
<td>Marine water</td>
<td>0.003275 mg/l</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: in case of insufficient ventilation suitable respiratory equipment should be used. Respiratory protection must be used if the general level exceeds the recommended occupational exposure limit. Air fed mask fitted with appropriate filters must be used when spraying. Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Impermeable gloves. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Eye protection: Safety glasses with side-shields. Manufactured and tested to EN 166 and designed to protect against splashes. Ensure eye bath is to hand.

Skin protection: Impermeable protective clothing.

Environmental: Prevent from entering in public sewers or the immediate environment. Handle in accordance with good industrial hygiene and safety practices.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Dark brown

Odour: Characteristic odour

Evaporation rate: not determined

Solubility in water: dispersible in water

Boiling point/range°C: 100

Flammability limits %: lower

Flash point°C: No data available.

Autoignition temperature°C: No data available.

pH: 1-2

Melting point/range°C: No data available.

Part. coeff. n-octanol/water: No data available.

Relative density: 1.35 - 1.45

9.2. Other information

Other information: Refer to Fire Varnish Application instructions before using. Pot life when mixed approximately 2 hours dependant on Temperature, Humidity and season of the year.
**Section 10: Stability and reactivity**

10.1. Reactivity

Reactivity : Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability : Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid : Heat.

10.5. Incompatible materials

Materials to avoid : Strong oxidising agents. Strong bases. exothermic reaction

10.6. Hazardous decomposition products

Haz. decomp. products : In combustion emits toxic fumes.

**Section 11: Toxicological information**

11.1. Information on toxicological effects

Hazardous ingredients:

2-PHENOXYETHANOL

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>LD50</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ORL</td>
<td>MUS</td>
<td>933</td>
<td>mg/kg</td>
</tr>
<tr>
<td>ORL</td>
<td>RAT</td>
<td>1260</td>
<td>mg/kg</td>
</tr>
<tr>
<td>SKN</td>
<td>RAT</td>
<td>14422</td>
<td>mg/kg</td>
</tr>
</tbody>
</table>

ORTHOPHOSPHORIC ACID...100%

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>LD50</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ORL</td>
<td>RAT</td>
<td>1530</td>
<td>mg/kg</td>
</tr>
</tbody>
</table>

Relevant hazards for product:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Route</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>DRM</td>
<td>Hazardous: calculated</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>OPT</td>
<td>Hazardous: calculated</td>
</tr>
</tbody>
</table>
Section 12: Ecological information

12.1. Toxicity
Ecotoxicity values : No data available.

12.2. Persistence and degradability
Persistence and degradability : No data available.

12.3. Bioaccumulative potential
Bioaccumulative potential : No data available.

12.4. Mobility in soil
Mobility : No data available.

12.5. Results of PBT and vPvB assessment
PBT identification : This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects
Other adverse effects : No data available.

Section 13: Disposal considerations

13.1. Waste treatment methods
Disposal operations : Transfer to a suitable container and arrange for collection by specialised disposal company.
Waste code number : 08 01 12
Disposal of packaging : Drained and rigorously scraped out empty containers are controlled wastes and should be disposed of according with the regulations made under the Control of Pollution Act and Environmental Protection Act.
NB : The user’s attention is drawn to the possible existence of regional or national regulations regarding disposal.

Symptoms / routes of exposure

Skin contact : Irritation or pain may occur at the site of contact. Blistering may occur.
Eye contact : Splashes in the eye may cause permanent damage.
Ingestion : Corrosive burns may appear around the lips. Corrosive - even small amounts can cause serious damage.
Inhalation : There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.
Delayed / immediate effects : Immediate effects can be expected after short-term exposure.
Other information : In all cases of doubt or where symptoms persist obtain medical attention. Formaldehyde is released during curing. It is irritating to the mucous membranes and may cause skin sensitisation.
**Section 14: Transport information**

14.1. UN number

**UN number:** UN3265

14.2. UN proper shipping name

**Shipping name:** Corrosive liquid, Acidic Organic, n.o.s. (Phosphoric Acid propyl ester, Phosphoric Acid)

14.3. Transport hazard class(es)

**Transport class:** 8

14.4. Packing group

**Packing group:** 111

14.5. Environmental hazards

**Environmentally hazardous:** No  
**Marine pollutant:** No

14.6. Special precautions for user

**Special precautions:** Always transport in upright sealed containers Ensure that persons transporting the product what to do in the event of an accident or spillage

**Tunnel code:** E

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

**Transport in bulk:** not Relevant

**Section 15: Regulatory information**

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

**Chemical Safety Assessment**

Chemical safety assessment : A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

**Section 16: Other information**

**Other information** : This safety data sheet has been prepared in accordance with Regulation(EC) No 1907/2006 REACH. This safety data sheet is prepared in accordance with Commission Regulation (EC) No 1272/2008. * indicates text in the SDS which has changed since the last revision.

**Phrases used in s.2 and s.3** : H290: May be corrosive to metals. H302: Harmful if swallowed. H314: Causes severe skin burns and eye damage. H315: Causes skin irritation. H318: Causes serious eye damage. H319: Causes serious eye irritation. H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H411: Toxic to aquatic life with long lasting effects.

**Legal disclaimer** : The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.
Safety Data Sheet

Astro FVO Varnish (Overcoat)

Revision 1 - 1st March 2019
Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

<table>
<thead>
<tr>
<th>Product name</th>
<th>Astro FVO Varnish (Overcoat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product code</td>
<td>AFFPTFVO</td>
</tr>
</tbody>
</table>

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

| Use of substance / mixture | An Air Drying Interior/Exterior Satin Overcoat for Astro IFV Varnish (Basecoat) |

1.3. Details of the supplier of the safety data sheet

<table>
<thead>
<tr>
<th>Company name</th>
<th>Astroflame (Fire Seals) Ltd.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intumescent House</td>
</tr>
<tr>
<td></td>
<td>Unit 8</td>
</tr>
<tr>
<td></td>
<td>The Io Centre</td>
</tr>
<tr>
<td></td>
<td>Stephenson Road</td>
</tr>
<tr>
<td></td>
<td>Segensworth</td>
</tr>
<tr>
<td></td>
<td>Fareham</td>
</tr>
<tr>
<td></td>
<td>England</td>
</tr>
<tr>
<td></td>
<td>PO15 5RU</td>
</tr>
<tr>
<td>Tel</td>
<td>01329 844 500</td>
</tr>
<tr>
<td>Fax</td>
<td>01329 844 600</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:sales@astroflame.com">sales@astroflame.com</a></td>
</tr>
</tbody>
</table>

1.4. Emergency telephone number

| Emergency tel              | 01329 844 500 (office hours only) |

Section 2: Hazards identification

2.1. Classification of the substance or mixture

<table>
<thead>
<tr>
<th>Classification under CHIP</th>
<th>-: R10; N: R51/53; -: R66</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most important adverse effects</td>
<td>Flammable. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Repeated exposure may cause skin dryness or cracking.</td>
</tr>
</tbody>
</table>

2.2. Label elements

<table>
<thead>
<tr>
<th>Label elements under CHIP</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard symbols</td>
<td>Dangerous for the environment.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Risk phrases</th>
<th>R10: Flammable.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</td>
</tr>
<tr>
<td></td>
<td>R66: Repeated exposure may cause skin dryness or cracking.</td>
</tr>
</tbody>
</table>
2.2. Label elements (continued)

Safety phrases:
- S2: Keep out of the reach of children.
- S16: Keep away from sources of ignition - No smoking.
- S20/21: When using do not eat, drink or smoke.
- S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S29/35: Do not empty into drains; dispose of this material and its container in a safe way.
- S33: Take precautionary measures against static discharges.
- S36/37/39: Wear suitable protective clothing, gloves and eye / face protection.
- S38: In case of insufficient ventilation, wear suitable respiratory equipment.
- S43: In case of fire, use water fog, carbon dioxide, powder, foam.
- S49: Keep only in the original container.
- S51: Use only in well-ventilated areas.
- S61: Avoid release to the environment. Refer to special instructions / safety data sheets.
- S62: If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

Precautionary phrases:
- Contains cobalt neodecanoate. May produce an allergic reaction.

2.3. Other hazards

PBT:
- This substance is not identified as a PBT substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

**SOLVENT NAPHTHA (PETROLEUM) ALIPHATIC**

<table>
<thead>
<tr>
<th>EINECS</th>
<th>CAS</th>
<th>CHIP Classification</th>
<th>CLP Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>: R10; N: R51/53; Xn: R65; - : R66</td>
<td>-</td>
<td>10-30%</td>
</tr>
</tbody>
</table>

**WHITE SPIRIT**

<table>
<thead>
<tr>
<th>EINECS</th>
<th>CAS</th>
<th>CHIP Classification</th>
<th>CLP Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Xn: R65; - : R10; N: R51/53</td>
<td>-</td>
<td>10-30%</td>
</tr>
</tbody>
</table>

**WHITE SPIRIT LOW AROMATIC**

<table>
<thead>
<tr>
<th>EINECS</th>
<th>CAS</th>
<th>CHIP Classification</th>
<th>CLP Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>: R10; Xn: R65; - : R66</td>
<td>-</td>
<td>1-10%</td>
</tr>
</tbody>
</table>

**SILICA (AMORPHOUS)**

<table>
<thead>
<tr>
<th>EINECS</th>
<th>CAS</th>
<th>CHIP Classification</th>
<th>CLP Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>231-545-4</td>
<td>112926-00-8</td>
<td>Substance with a Community workplace exposure limit.</td>
<td>-</td>
<td>1-10%</td>
</tr>
</tbody>
</table>
### 3.2. Mixtures (continued)

#### XYLENE

<table>
<thead>
<tr>
<th>EINECS</th>
<th>CAS</th>
<th>CHIP Classification</th>
<th>CLP Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>215-535-7</td>
<td>1330-20-7</td>
<td>-=: R10; Xn: R20/21; Xi: R38</td>
<td>Flam. Liq. 3: H226; Acute Tox. 4: H332; Acute Tox. 4: H312; Skin Irrit. 2: H315</td>
<td>1-10%</td>
</tr>
</tbody>
</table>

#### MESITYLENE

| 203-604-4 | 108-67-8 | -=: R10; Xi: R37; N: R51/53 | Flam. Liq. 3: H226; STOT SE 3: H335; Aquatic Chronic 2: H411 | 1-10%   |

#### 1,2,4-TRIMETHYLBENZENE

| 202-436-9 | 95-63-6 | -=: R10; Xn: R20; Xi: R36/37/38; N: R51/53 | Flam. Liq. 3: H226; Acute Tox. 4: H332; Eye Irrit. 2: H319; STOT SE 3: H335; Skin Irrit. 2: H315; Aquatic Chronic 2: H411 | 1-10%   |

#### CUMENE

| 202-704-5 | 98-82-8 | -=: R10; Xi: R37; N: R51/53; Xn: R65 | Flam. Liq. 3: H226; Asp. Tox. 1: H304; STOT SE 3: H335; Aquatic Chronic 2: H411 | <1%     |

#### 2-HYDROXY-4-N-OCTOXYBENZOPHENONE

| 217-421-2 | 1843-05-6 | Xi: R36/37/38; N: R50/53 | - | <1% |

#### COBALT NEODECANOATE

| 248-373-0 | 27253-31-2 | Xn: R22; Xn: R65; Xi: R38; Xi: R41; Sens.: R43; N: R51/53 | - | <1% |

**Non-hazardous ingredients:**

#### ETHYLBENZENE

<table>
<thead>
<tr>
<th>EINECS</th>
<th>CAS</th>
<th>CHIP Classification</th>
<th>CLP Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>202-849-4</td>
<td>100-41-4</td>
<td>F: R11; Xn: R20</td>
<td>Flam. Liq. 2: H225; Acute Tox. 4: H332</td>
<td>&lt;1%</td>
</tr>
</tbody>
</table>

#### DIPROPYLENE GLYCOL DIBENZOATE

| 248-258-5 | 27138-31-4 | - | - | <1% |
### Section 4: First aid measures

#### 4.1. Description of first aid measures

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Skin contact</strong></td>
<td>Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water.</td>
</tr>
<tr>
<td><strong>Eye contact</strong></td>
<td>Bathe the eye with running water for 15 minutes. Consult a doctor.</td>
</tr>
<tr>
<td><strong>Ingestion</strong></td>
<td>Do not induce vomiting. Wash out mouth with water. Obtain immediate medical attention.</td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td>Remove casualty from exposure ensuring one’s own safety whilst doing so. If conscious, ensure the casualty sits or lies down. If unconscious and breathing is OK, place in the recovery position. If unconscious, check for breathing and apply artificial respiration if necessary. Consult a doctor.</td>
</tr>
</tbody>
</table>

#### 4.2. Most important symptoms and effects, both acute and delayed

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Skin contact</strong></td>
<td>There may be mild irritation at the site of contact. repeated exposure may cause skin dryness and/or cracking May Produce an allergic reaction</td>
</tr>
<tr>
<td><strong>Eye contact</strong></td>
<td>There may be irritation and redness.</td>
</tr>
<tr>
<td><strong>Ingestion</strong></td>
<td>There may be irritation of the throat.</td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td>Exposure to organic solvent vapours in excess of stated occupational exposure limits may result in adverse health effects</td>
</tr>
<tr>
<td><strong>Delayed / immediate effects</strong></td>
<td>Immediate effects can be expected after short-term exposure.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Immediate / special treatment</strong></td>
<td>In all cases of doubt, or when symptoms persist seek medical attention. Show this safety data sheet to the doctor in attendance.</td>
</tr>
</tbody>
</table>

### Section 5: Fire-fighting measures

#### 5.1. Extinguishing media

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Extinguishing media</strong></td>
<td>extinguish with foam, dry powder, carbon dioxide or water fog. Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exposure hazards</strong></td>
<td>Flammable. Forms explosive air-vapour mixture. In combustion emits toxic fumes.</td>
</tr>
</tbody>
</table>

#### 5.3. Advice for fire-fighters

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advice for fire-fighters</strong></td>
<td>Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes. cool closed containers exposed to fire with water. Do not allow run off to enter watercourses or drains</td>
</tr>
</tbody>
</table>
Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. Avoid breathing any vapours. Eliminate all sources of ignition. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of mists in the air. In case of insufficient ventilation, wear suitable respiratory protection. If rubbing down dried film, wear suitable mask and protective clothing.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: store between 5 and 30°C in a dry well ventilated area. Keep container tightly closed. Keep away from sources of ignition. Avoid incompatible materials and conditions - see section 10 of SDS.

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): The identified uses for this product are detailed in Section 1.2. Refer to Application Instructions before using this product.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients:

WHITE SPIRIT LOW AROMATIC

<table>
<thead>
<tr>
<th>Workplace exposure limits:</th>
<th>State</th>
<th>8 hour TWA</th>
<th>15 min. STEL</th>
<th>8 hour TWA</th>
<th>15 min. STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>1000 mg/m3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

SILICA (AMORPHOUS)

<table>
<thead>
<tr>
<th>State</th>
<th>8 hour TWA</th>
<th>15 min. STEL</th>
<th>8 hour TWA</th>
<th>15 min. STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>0.3mg/m3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment are not a source of ignition. Ensure all engineering measures mentioned in section 7 of SDS are in place.

Respiratory protection: Respiratory protection must be used if the general level exceeds the recommended occupational exposure limit.

Hand protection: Protective gloves.

Eye protection: Safety glasses.

Skin protection: Protective clothing.

Environmental: Prevent from entering in public sewers or the immediate environment. Ensure emissions from ventilation or equipment comply with environmental protection legislation.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Pale yellow

Odour: Characteristic odour

Solubility in water: Not miscible

Viscosity: Viscous

Flammability limits %: lower: 0.8

Vapour pressure: heaver than air

VOC g/l: 397

Flash point°C: 38

Relative density: 0.97

9.2. Other information

Other information: VOC Content: EU limit for this product is (CatA/i) is 500 g/litre

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat. Sources of ignition.
10.5. Incompatible materials

**Materials to avoid**: Strong oxidising agents. Strong acids. Strong bases.

10.6. Hazardous decomposition products

**Haz. decomp. products**: In combustion emits toxic fumes.

### Section 11: Toxicological information

11.1. Information on toxicological effects

**Toxicity values**: Not applicable.

**Symptoms / routes of exposure**

- **Skin contact**: There may be mild irritation at the site of contact. Repeated exposure may cause skin dryness and/or cracking. May produce an allergic reaction.
- **Eye contact**: There may be irritation and redness.
- **Ingestion**: There may be irritation of the throat.
- **Inhalation**: Exposure to organic solvent vapours in excess of stated occupational exposure limits may result in adverse health effects.
- **Delayed / immediate effects**: Immediate effects can be expected after short-term exposure.
- **Other information**: In all cases of doubt or where symptoms persist obtain medical attention.

### Section 12: Ecological information

12.1. Toxicity

**Ecotoxicity values**: Not applicable.

12.2. Persistence and degradability

**Persistence and degradability**: Not biodegradable.

12.3. Bioaccumulative potential

**Bioaccumulative potential**: Bioaccumulation potential.

12.4. Mobility in soil

**Mobility**: No data available.

12.5. Results of PBT and vPvB assessment

**PBT identification**: This substance is not identified as a PBT substance.

12.6. Other adverse effects

**Other adverse effects**: Toxic to aquatic organisms. Toxic to soil organisms.
Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

Waste code number: 08 01 12

Disposal of packaging: Arrange for collection by specialised disposal company.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

14.1. UN number

UN number: UN1263

14.2. UN proper shipping name

Shipping name: PAINT

14.3. Transport hazard class(es)

Transport class: 3

14.4. Packing group

Packing group: III

14.5. Environmental hazards

Environmentally hazardous: Yes

Marine pollutant: No

14.6. Special precautions for user

Special precautions: Always transport in upright sealed containers. Ensure that persons transporting the product what to do in the event of an accident or spillage.

Tunnel code: D/E

Transport category: 3

Section 15: Regulatory information

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

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.
Section 16: Other information

Other information:

This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3:

H225: Highly flammable liquid and vapour.
H226: Flammable liquid and vapour.
H304: May be fatal if swallowed and enters airways.
H312: Harmful in contact with skin.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.
H335: May cause respiratory irritation.
H411: Toxic to aquatic life with long lasting effects.
R10: Flammable.
R11: Highly flammable.
R20/21: Harmful by inhalation and in contact with skin.
R20: Harmful by inhalation.
R22: Harmful if swallowed.
R36/37/38: Irritating to eyes, respiratory system and skin.
R37: Irritating to respiratory system.
R38: Irritating to skin.
R41: Risk of serious damage to eyes.
R43: May cause sensitisation by skin contact.
R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65: Harmful: may cause lung damage if swallowed.
R66: Repeated exposure may cause skin dryness or cracking.

Legal disclaimer:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.