

# SAFETY DATA SHEET



Cookson Electronics ASSEMBLY MATERIALS

## RF800 Flux 25 Ltr

### 1. Identification of the preparation and of the company

**Product name** : RF800 Flux 25 Ltr**Code** : 10441**Head Office** : **Cookson Electronics**  
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**Surrey**  
**England**  
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The Netherlands  
Tel: +31 73 6280 111  
Fax: +31 73 6219 283**Contact person** : shosken@cooksonelectronics.com**Material uses** : soldering

### 2 Hazards identification

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

**Classification** : F; R11  
Xi; R36  
R43, R67

#### Effects and symptoms

**Inhalation**

May be harmful by inhalation after often repeated exposure.

**Ingestion**

May be harmful if swallowed.

**Skin contact**

Slightly hazardous by the following route of exposure: of skin contact (irritant).

**Eye contact**

Hazardous by the following route of exposure: of eye contact (irritant).

**Toxicity data****Rosin, polymd.:** Caution: exposure to this material may cause certain sensitive individuals to develop eczema and/or asthma. Sensitised persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used.

May cause allergic skin reactions with repeated exposure. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used.

**Rosin:** Caution: exposure to this material may cause certain sensitive individuals to develop eczema and/or asthma. Sensitised persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used.

May cause allergic skin reactions with repeated exposure. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used.

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

### 3 Composition/information on ingredients

**Substance/preparation** : Preparation

Ingredient name	CAS number	%	EC number	Classification
Europe				

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### 3 Composition/information on ingredients

propan-2-ol	67-63-0	80 - 100	200-661-7	F; R11 Xi; R36 R67
Distillates (petroleum), hydrotreated light	64742-47-8	5 - 10	265-149-8	Xn; R65
succinic acid	110-15-6	1 - 5	203-740-4	Xi; R36
rosin	8050-09-7	0.5 - 1	232-475-7	R43
<b>See section 16 for the full text of the R-phrases declared above</b>				

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

The classifications listed, indicate the potential hazards of the ingredients

### 4. First-aid measures

#### First-aid measures

- Inhalation** : Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- 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.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

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

### 5. Fire-fighting measures

#### Extinguishing media

- Suitable** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Not suitable** : Do not use water jet.
- Special exposure hazards** : Highly flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

## 5. Fire-fighting measures

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.

- Hazardous combustion products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide
- 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.

## 6. Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
- 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).
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.
- Small spill** : Stop leak if without risk. Move containers from spill area. 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. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

## 7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see section 8). 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. 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. 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 non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : 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. 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.

## 7. Handling and storage

### Packaging materials

<b>Recommended</b>	: Use original container.
<b>Danish fire class</b>	: I-2
<b>Austria - VbF class</b>	: A I Very dangerous flammable liquid.
<b>Czech Republic - Storage code</b>	: I

## 8. Exposure controls/personal protection

### Exposure limit values

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
<b>Europe</b>	
propan-2-ol	<b>ACGIH TLV (United States, 1/2008).</b> STEL: 400 ppm 15 minute(s). TWA: 200 ppm 8 hour(s).
Distillates (petroleum), hydrotreated light	<b>ACGIH TLV (United States, 1/2008). Absorbed through skin.</b> TWA: 200 mg/m <sup>3</sup> 8 hour(s).
<b>Sweden</b>	
propan-2-ol	<b>AFS 2005:17 (Sweden, 6/2007).</b> STEL: 600 mg/m <sup>3</sup> 15 minute(s). STEL: 250 ppm 15 minute(s). TWA: 350 mg/m <sup>3</sup> 8 hour(s). TWA: 150 ppm 8 hour(s).
<b>Denmark</b>	
propan-2-ol	<b>Arbejdstilsynet (Denmark, 3/2008). Absorbed through skin. Carcinogen.</b> TWA: 490 mg/m <sup>3</sup> 8 hour(s). TWA: 200 ppm 8 hour(s).
<b>Norway</b>	
propan-2-ol	<b>Arbejdstilsynet (Norway, 11/2007).</b> TWA: 245 mg/m <sup>3</sup> 8 hour(s). TWA: 100 ppm 8 hour(s).
<b>France</b>	
propan-2-ol	<b>INRS (France, 12/2007). Notes: indicative exposure limits</b> STEL: 980 mg/m <sup>3</sup> 15 minute(s). STEL: 400 ppm 15 minute(s).
rosin	<b>INRS (France, 12/2007). Notes: indicative exposure limits</b> TWA: 0.1 mg/m <sup>3</sup> 8 hour(s).
<b>Netherlands</b>	
propan-2-ol	<b>Nationale MAC-lijst (Netherlands, 1/2004). Notes:</b> TGG: 650 mg/m <sup>3</sup> 8 hour(s). Form: All forms TGG: 250 ppm 8 hour(s). Form: All forms
<b>Germany</b>	
propan-2-ol	<b>TRGS900 AGW (Germany, 7/2008).</b> PEAK: 1000 mg/m <sup>3</sup> 15 minute(s). PEAK: 400 ppm 15 minute(s). TWA: 500 mg/m <sup>3</sup> 8 hour(s). TWA: 200 ppm 8 hour(s).
<b>Finland</b>	
propan-2-ol	<b>Työterveyslaitos, Sosiaali- ja terveysministeriö (Finland, 8/2007).</b> STEL: 620 mg/m <sup>3</sup> 15 minute(s). STEL: 250 ppm 15 minute(s). TWA: 500 mg/m <sup>3</sup> 8 hour(s). TWA: 200 ppm 8 hour(s).
<b>United Kingdom (UK)</b>	

## 8. Exposure controls/personal protection

propan-2-ol	<b>EH40/2005 WELs (United Kingdom (UK), 8/2007).</b> STEL: 1250 mg/m <sup>3</sup> 15 minute(s). STEL: 500 ppm 15 minute(s). TWA: 999 mg/m <sup>3</sup> 8 hour(s). TWA: 400 ppm 8 hour(s).
rosin	<b>EH40-MEL (United Kingdom (UK), 2002). Skin sensitiser. Inhalation sensitiser.</b> TWA: 0.05 mg/m <sup>3</sup> 8 hour(s). Form: Rosin-based solder flux fume STEL: 0.15 mg/m <sup>3</sup> 15 minute(s). Form: Rosin-based solder flux fume
Rosin, polyimd.	<b>EH40-MEL (United Kingdom (UK), 2002). Skin sensitiser. Inhalation sensitiser.</b> TWA: 0.05 mg/m <sup>3</sup> 8 hour(s). Form: Rosin-based solder flux fume STEL: 0.15 mg/m <sup>3</sup> 15 minute(s). Form: Rosin-based solder flux fume
<b>Austria</b>	
propan-2-ol	<b>GKV_MAK (Austria, 9/2007).</b> STEL: 2000 mg/m <sup>3</sup> , 4 times per shift, 15 minute(s). STEL: 800 ppm, 4 times per shift, 15 minute(s). TWA: 500 mg/m <sup>3</sup> 8 hour(s). TWA: 200 ppm 8 hour(s).
<b>Switzerland</b>	
propan-2-ol	<b>SUVA (Switzerland, 1/2007). Notes: not temporary</b> STEL: 1000 mg/m <sup>3</sup> 15 minute(s). STEL: 400 ppm 15 minute(s). TWA: 500 mg/m <sup>3</sup> 8 hour(s). TWA: 200 ppm 8 hour(s).
<b>Belgium</b>	
propan-2-ol	<b>Lijst Grenswaarden / Valeurs Limites (Belgium, 6/2007).</b> STEL: 1248 mg/m <sup>3</sup> 15 minute(s). STEL: 500 ppm 15 minute(s). TWA: 997 mg/m <sup>3</sup> 8 hour(s). TWA: 400 ppm 8 hour(s).
Distillates (petroleum), hydrotreated light	<b>Lijst Grenswaarden / Valeurs Limites (Belgium, 6/2007). Absorbed through skin. Notes: total hydrocarbon vapour</b> TWA: 200 mg/m <sup>3</sup> , (total hydrocarbon vapour) 8 hour(s).
<b>Spain</b>	
propan-2-ol	<b>INSHT (Spain, 1/2008).</b> STEL: 1250 mg/m <sup>3</sup> 15 minute(s). STEL: 500 ppm 15 minute(s). TWA: 998 mg/m <sup>3</sup> 8 hour(s). TWA: 400 ppm 8 hour(s).
<b>Turkey</b>	
propan-2-ol	<b>NIOSH REL (United States, 6/2008).</b> STEL: 1225 mg/m <sup>3</sup> 15 minute(s). STEL: 500 ppm 15 minute(s). TWA: 980 mg/m <sup>3</sup> 10 hour(s). TWA: 400 ppm 10 hour(s).
rosin	<b>NIOSH REL (United States, 6/2008). Notes: as formaldehyde</b> TWA: 0.1 mg/m <sup>3</sup> , (as formaldehyde) 10 hour(s).
<b>Czech Republic</b>	
propan-2-ol	<b>178/2001 (Czech Republic, 12/2007). Absorbed through skin.</b> STEL: 1000 mg/m <sup>3</sup> 15 minute(s). STEL: 407 ppm 15 minute(s). TWA: 500 mg/m <sup>3</sup> 8 hour(s). TWA: 203.5 ppm 8 hour(s).
rosin	<b>178/2001 (Czech Republic, 12/2007). Skin sensitiser.</b> TWA: 1 mg/m <sup>3</sup> 8 hour(s).
<b>Ireland</b>	

## 8. Exposure controls/personal protection

propan-2-ol	<b>NAOSH (Ireland, 8/2007). Absorbed through skin.</b> OELV-15min: 400 ppm 15 minute(s). OELV-8hr: 200 ppm 8 hour(s).
<b>Italy</b>	
propan-2-ol	<b>ACGIH TLV (United States, 1/2008).</b> STEL: 400 ppm 15 minute(s). TWA: 200 ppm 8 hour(s).
Distillates (petroleum), hydrotreated light	<b>ACGIH TLV (United States, 1/2008). Absorbed through skin.</b> TWA: 200 mg/m <sup>3</sup> 8 hour(s).
<b>Estonia</b>	
propan-2-ol	<b>Sotsiaalminister (Estonia, 10/2007).</b> STEL: 600 mg/m <sup>3</sup> 15 minute(s). STEL: 250 ppm 15 minute(s). TWA: 350 mg/m <sup>3</sup> 8 hour(s). TWA: 150 ppm 8 hour(s).
<b>Lithuania</b>	
propan-2-ol	<b>Del Lietuvos Higienos Normos (Lithuania, 10/2007).</b> STEL: 600 mg/m <sup>3</sup> 15 minute(s). STEL: 250 ppm 15 minute(s). TWA: 350 mg/m <sup>3</sup> 8 hour(s). TWA: 150 ppm 8 hour(s).
<b>Slovakia</b>	
propan-2-ol	<b>Nariadenie Vlády Slovenskej republiky (Slovakia, 6/2007).</b> CEIL: 1000 mg/m <sup>3</sup> TWA: 500 mg/m <sup>3</sup> 8 hour(s). TWA: 200 ppm 8 hour(s).
<b>Hungary</b>	
propan-2-ol	<b>EÜM-SzCsM (Hungary, 12/2007). Absorbed through skin. Skin sensitiser.</b> PEAK: 2000 mg/m <sup>3</sup> 15 minute(s). TWA: 500 mg/m <sup>3</sup> 8 hour(s).
<b>Poland</b>	
propan-2-ol	<b>Ministra Pracy i Polityki Społecznej (Poland, 9/2007).</b> STEL: 1200 mg/m <sup>3</sup> 15 minute(s). TWA: 900 mg/m <sup>3</sup> 8 hour(s).
<b>Slovenia</b>	
propan-2-ol	<b>Uradni list Republike Slovenije (Slovenia, 6/2007).</b> TWA: 500 mg/m <sup>3</sup> 8 hour(s). TWA: 200 ppm 8 hour(s).
<b>Latvia</b>	
propan-2-ol	<b>LV Nat. Standardisation and Meterological Centre (Latvia, 5/2007).</b> STEL: 600 mg/m <sup>3</sup> 15 minute(s). TWA: 350 mg/m <sup>3</sup> 8 hour(s).
rosin	<b>LV Nat. Standardisation and Meterological Centre (Latvia, 5/2007).</b> TWA: 4 mg/m <sup>3</sup> 8 hour(s).
<b>Greece</b>	
propan-2-ol	<b>PD 90/1999 (Greece, 8/2007).</b> STEL: 1225 mg/m <sup>3</sup> 15 minute(s). STEL: 500 ppm 15 minute(s). TWA: 980 mg/m <sup>3</sup> 8 hour(s). TWA: 400 ppm 8 hour(s).
<b>Portugal</b>	

## 8. Exposure controls/personal protection

propan-2-ol	<b>Instituto Português da Qualidade (Portugal, 3/2007).</b> STEL: 400 ppm 15 minute(s). TWA: 200 ppm 8 hour(s).
Distillates (petroleum), hydrotreated light	<b>Instituto Português da Qualidade (Portugal, 3/2007). Absorbed through skin. Notes: expressed as total hydrocarbons</b> TWA: 200 mg/m <sup>3</sup> , (expressed as total hydrocarbons) 8 hour(s). Form: vapour

**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 European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

### Exposure controls

- Occupational exposure 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.
- 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. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- 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. Recommended: organic vapour (Type A) and particulate filter FFA1P2D EN405:2002
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. 4-8 hours (breakthrough time): nitrile rubber
- Eye 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 or dusts. Recommended: safety glasses with side-shields EN 166 1F
- Skin 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. Recommended: overall
- 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.

## 9. Physical and chemical properties

### General information

#### Appearance

- Physical state** : Liquid.
- Colour** : Amber. [Light]
- Odour** : Alcohol-like. [Slight]

### Important health, safety and environmental information

- Boiling point** : 82°C (179.6°F)
- Flash point** : Closed cup: 12°C (53.6°F)
- Explosion limits** : Lower: 2%  
Upper: 12%
- Relative density** : 0.794

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## 9. Physical and chemical properties

<b>Solubility</b>	: Easily soluble in the following materials: cold water and hot water.
<b>Viscosity</b>	: Kinematic: 0.02 cm <sup>2</sup> /s (2 cSt)
<b>Vapour density</b>	: >1 [Air = 1]
<b>VOC content</b>	: 95.8 % (w/w) [ISO % 11890-2]

### Other information

**Auto-ignition temperature** : 425°C (797°F)

## 10. Stability and reactivity

<b>Stability</b>	: The product is stable.
<b>Conditions to avoid</b>	: 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. Do not allow vapor to accumulate in low or confined areas.
<b>Materials to avoid</b>	: Highly reactive or incompatible with the following materials: oxidizing materials
<b>Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11. Toxicological information

### Potential acute health effects

<b>Inhalation</b>	: Vapours may cause drowsiness and dizziness.
<b>Ingestion</b>	: No known significant effects or critical hazards.
<b>Skin contact</b>	: May cause skin irritation. May cause sensitisation by skin contact.
<b>Eye contact</b>	: Irritating to eyes.
<b>Acute toxicity</b>	

### Over-exposure signs/symptoms

<b>Target organs</b>	: Contains material which causes damage to the following organs: upper respiratory tract, eye, lens or cornea. Contains material which may cause damage to the following organs: skin, central nervous system (CNS).
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Product name	List name	Name on list	Classification	Notes
Netherlands propan-2-ol	Netherlands Carcinogenic Chemicals	isopropylalcohol	Carc.	Carcinogenic process: process with strong acid used for the production of isopropylalcohol
Distillates (petroleum), hydrotreated light	Netherlands Carcinogenic Chemicals	(complexe) aardolie- en steenkoolderivaten EG nrs. beginnend met 232, 263, 265-275, 277, 278, 283-285, 287, 289, 291-298, 300, 302, 305-310	Carc.	Part of these derivates are only classified as carcinogenic if the content of benzene > 0.1% and/or benzo(a)pyrene > 0.005% or 1,3-butadiene > 0,1% or DMSO-extract > 3%. Please refer to Publicatieblad L381 of December 31th, 1994: the 21st amendment of Directive

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## 11. Toxicological information

				67/548/EEC or later amendments of this Directive.
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## 12. Ecological information

### Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
propan-2-ol	-	Acute LC50 11130000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 4 to 8 weeks - 1.1 to 3.1 cm	96 hours
	-	Acute LC50 10400000 to 10600000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 29 days - 20 mm - 0.103 g	96 hours
	-	Acute LC50 9640000 to 10000000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 31 days - 20.6 mm - 0.117 g	96 hours
	-	Acute LC50 6550000 to 7450000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 31 days - 17.4 mm - 0.082 g	96 hours
	-	Acute LC50 4200000 ug/L Fresh water	Fish - Harlequinfish, red rasbora - Rasbora heteromorpha - 1 to 3 cm	96 hours
	-	Acute LC50 1400000 to 1950000 ug/L Marine water	Crustaceans - Common shrimp, sand shrimp - Crangon crangon	48 hours
	-	Acute LC50 >1400000 ug/L	Fish - Western mosquitofish - Gambusia affinis - 20 to 30 mm	96 hours
Distillates (petroleum), hydrotreated light	-	Acute LC50 5900 ug/L Fresh water	Fish - Bluegill - Lepomis macrochirus - 35 to 75 mm	4 days
	-	Acute LC50 2900 ug/L Fresh water	Fish - Rainbow trout, donaldson	96 hours

## 12. Ecological information

	-	Acute LC50 2600 ug/L Fresh water	trout - Oncorhynchus mykiss - 35 to 75 mm Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - 35 to 75 mm	4 days
	-	Acute LC50 2400 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - 35 to 75 mm	4 days
	-	Acute LC50 2200 ug/L Fresh water	Fish - Bluegill - Lepomis macrochirus - 35 to 75 mm	4 days
succinic acid	-	Acute EC50 374200 to 400000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - LARVAE - <24 hours	48 hours

### Biodegradability

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

**AOX** : The product contains organically bound halogens and can contribute to the AOX value in waste water.

## 13. Disposal considerations



**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

**European waste catalogue (EWC)** : 14 06 03\* other solvents and solvent mixtures

**Hazardous waste** : Yes.

## 14. Transport information


### International transport regulations

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
<b>ADR/RID Class</b>	1993	FLAMMABLE LIQUIDS, N.O.S. (propan-2-ol, mixture)	3	II		<b>Hazard identification number</b> 33 <b>CEPIC Tremcard</b> 30GF1-II
<b>IMDG Class</b>	1993	FLAMMABLE LIQUIDS, N.O.S. (propan-2-ol, mixture)	3	II		<b>Emergency schedules (EmS)</b> F-E, S-E

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## 14. Transport information

<b>IATA Class</b>	1993	FLAMMABLE LIQUIDS, N.O.S. (propan-2-ol, mixture)	3	II		<b>Passenger and Cargo Aircraft</b> Quantity limitation: 5 L <b>Cargo Aircraft Only</b> Quantity limitation: 60 L
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PG\* : Packing group

## 15. Regulatory information

### EU regulations

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

**Hazard symbol or symbols** :



Highly flammable, Irritant

**Risk phrases**

: R11- Highly flammable.  
R36- Irritating to eyes.  
R43- May cause sensitisation by skin contact.  
R67- Vapours may cause drowsiness and dizziness.

**Safety phrases**

: S24- Avoid contact with skin.  
S37- Wear suitable gloves.

**Contains**

: rosin

232-475-7

**Product use**

: Industrial applications.

### France

**Professional disease or diseases**

: propan-2-ol  
rosin

84

65, 66

### Germany

**Hazardous incident ordinance**

: Applicable. Category: 7b Highly flammable liquid.

**Hazard class for water**

: 2 Appendix No. 4

**Technical instruction on air quality control**

: TA-Luft Number 5.2.5: 85.8%

### Italy

**Emission control directive**

: Not classified.

## 16. Other information

**Full text of R-phrases referred to in sections 2 and 3 - Europe**

: R11- Highly flammable.  
R65- Harmful: may cause lung damage if swallowed.  
R36- Irritating to eyes.  
R43- May cause sensitisation by skin contact.  
R67- Vapours may cause drowsiness and dizziness.

**Full text of classifications referred to in sections 2 and 3 - Europe**

: F - Highly flammable  
Xn - Harmful  
Xi - Irritant

### History

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**Prepared by**

: Simon Hosken  
Environmental, Health and Safety Manager

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## 16. Other information

✔ Indicates information that has changed from previously issued version.

### References

The Health and Safety At Work Act 1974, section 6.  
Control of Substances Hazardous to Health (CoSHH) Regulations 2002 and its amendments.

Preparation contains solely TSCA and REACH 1907/2006 listed substances.

This safety data sheet has been prepared in accordance with the requirements of the Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 which implement EC Directives 1999/45/EC and 2001/58/EC and their amendments.

### Notice to reader

*To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.*

*Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.*