

Safety Data Sheet

According to 1907/2006/EC, Article 31 REACH

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

1.1. Product Identifier	
Product Name	Ecowave 23 Low Rosin Content No Clean Flux
1.2. Relevant Identified uses of the substance or mixture and uses advised against	
Description	No Clean Flux/Rework Flux.
1.3. Details of the supplier of the safety data sheet	
Company Address Web Telephone Fax Email	Allendale Electronics Limited PCB Soldering Dept. Pindar Road Hoddesdon Hertfordshire EN11 0BZ England www.pcb-soldering.co.uk 01992 455924 01992 450781 sales@pcb-soldering.co.uk
1.4. Emergency telephone number	
Emergency Telephone Number	+44(0)1706 218888 (8am-5pm Monday-Friday)

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture	
Classification- EU Directive 67/548/EEC 1999/45/EC Main Hazards	F; R11 Xi ;R36/37/38 R67 Symbols: F: Highly Flammable. Xi: Irritant Highly Flammable. Irritating to eyes. Vapours may cause drowsiness and dizziness Contains Rosin (Colophony)- Rosin fumes are irritating and may cause respiratory sensitisation by inhalation. Persons with a history of asthma, allergies or any respiratory problems should not be employed in any process in which the product is used. May cause an allergic skin reaction with repeated exposure.
Classification- EC 1272/2008 Main Hazards	Flammable Liquid Category 2 Eye irritation:Category 2. Target organ toxicant (central nervous system):Category 3 Rosin - Skin Sensitization (Category 1) Rosin - Respiratory Sensitization (Category 1)

2.2. Label Elements EU Directive 67/548/EEC 1999/45/EC	
Symbols	F: Highly Flammable. Xi: Irritant  
Risk Phrases	R11 - Highly Flammable R36/37/38 - Irritating to eyes, Respiratory system and skin R41 - Risk of serious damage to eyes R67 - Vapours may cause drowsiness and dizziness S16 - Keep away from sources of ignition-No smoking
Safety Phrases	

Label Elements EC 1272/2008 (CLP/GHS)	
GHS Symbols	   GHS02 GHS07 GHS08

Hazard Statements	Signal Word: Danger H225: Highly Flammable liquid and vapour H315: Causes Skin irritation H319: Causes serious eye irritation H336 May cause drowsiness or dizziness H335: May cause respiratory irritation P210: Keep away from heat/sparks/open flames/hot surfaces-No smoking. P233: Keep container tightly closed P243: Use only non sparking tools P261: Avoid breathing mist/vapours P280: Wear protective gloves and eye protection. P301 + P310: If swallowed, immediately call a doctor. P305+P351+P338: If in EYES, rinse cautiously with water for several minutes. Remove contact lenses. P403+P235: Store in a well-ventilated place. Keep cool. Contains propan-2-ol
Precautionary Statements	

SECTION 3: Composition/Information on ingredients

3.2. This material is defined as a mixture
67/548/EEC/1999/45/EC

Chemical Name	CAS No	EC No.	REACH Registration Number	Conc.(%w/w)	DSD Classification	CLP
Isopropanol (Propan-2-ol)	67-63 -0	200-661-7	01-2119457558-25	90-100 %	F;R11 Xi;R36 R67 Xi;R36	Eye irrit.2 H319 Flam. Liq.2 H225 STOT SE 3 H336
Rosin –Colophony	8050-09-7	232-475-7	Not available	<5	Xi-Irritant, R43	
Carboxylic Acid C4-C6	68603-87-2	271-678-5	Not available	<5	R37/38, R41	

SECTION 4: First Aid Measures

4.1. Description of first aid measures

Inhalation Eye contact Skin contact Ingestion	Move the exposed person to fresh air. If not breathing give artificial respiration. Rinse immediately with plenty of water for 15 minutes holding the eyelid open. Wash off immediately with plenty of soap and water. Remove contaminated clothing. Rinse mouth thoroughly. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person.
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4.2. Most important symptoms and effects, both acute and delayed

	Central nervous system depression, prolonged or repeated exposure can cause: nausea, headache, vomiting, narcosis, drowsiness. Over-exposure may cause mild, reversible liver effects.
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4.3 Indication of any immediate medical attention and special treatment needed

	No data available
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SECTION 5: Firefighting Measures

5.1. Extinguishing Media

	Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.
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5.2. Special hazards arising from the substance or mixture

	Carbon oxides
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5.3 Advice for Fire Fighters

	Wear self contained breathing apparatus for fire fighting if necessary. Use water spray to cool unopened containers.
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SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

	Use personal protective equipment. Avoid breathing vapours and mist. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
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6.2. Environmental precautions

	Do not allow product to enter drains. Prevent further spillage if safe.
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6.3. Methods and material for containment and cleaning up

	Asorb with inert, absorbent material. Sweep up. Transfer to suitable, labelled containers for disposal. Clean spillage area thoroughly with plenty of water. Do not let product enter drains.
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6.4. reference to other sections

	See section 2,8,13 for further information
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SECTION 7: Handling and Storage

7.1. Precautions for safe handling

	Avoid contact with eyes and skin. Ensure adequate ventilation of the working area. Adopt best manual handling considerations when handling, carrying and using.
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7.2. Precautions for safe storage, including and incompatibilities

	Keep in a cool, dry, well ventilated area. Keep containers tightly closed. Store in correctly labelled containers. Keep away from sources of ignition-no smoking.
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7.3. Specific end use(s)

	To be used as a soldering flux
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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Exposure Limit Values

Isopropanol (Propan-2-ol)	STEL 500ppm 1,250mg/m ³ UK EH40 WEL-Workplace Exposure limits
Rosin	TWA 400ppm 999mg/m ³ UK EH40 WEL-Workplace Exposure limits 0.15 mg/ m ³ over a 15 minute reference period UK EH40: MEL (Skin sensitizer). 0.05 mg/m ³ over an 8 hour reference period

8.2. Exposure Controls

8.2.1 Appropriate engineering controls	Ensure adequate ventilation of the working area. The fumes produced during soldering should be extracted away from the breathing zone of the operators using properly designed efficient, well-maintained, local exhaust ventilation. See HSG 37 and INDG 249, HSE publications for further information.
8.2.2. Individual protection measures	Wear protective clothing. Handle in accordance with good industrial hygiene practice. Wash hands before breaks and at the end of day.
Eye/face protection	In case of splashing wear approved safety goggles. Respiratory protection if ventilation is inadequate.
Skin / Hand protection	Chemical resistant gloves (PVC)

SECTION 9: Information on basic physical and chemical properties

State	Liquid
Colour	Clear
Odour	Alcoholic
pH	No data available
Melting point	-89.5°C
Freezing point	No data available
Boiling point	No data available
Flash point	<19°C
Evaporation rate	3.0
Flammability limits	No data available
Vapour flammability	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	0.800g/cm ³ at 25°C
Fat solubility	No data available
Partition coefficient	0.05
Autoignition temperature	425°C
Viscosity	No data available
Solubility	Soluble in water
Decomposition Temperature	No data available

9.2. Other Information

Conductivity	No data available
Surface Tension	20.8mN/m at 25°C
Gas group	No data available

SECTION 10: Stability and Reactivity

10.1. Reactivity

	No data available on this product
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10.2. Stability

	Stable under normal conditions
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10.3. Possibility of Hazardous Reactions

	No data available
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10.4. Conditions to avoid

	Heat, flames and sparks. Extreme temperatures and direct sunlight.
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10.5. Incompatible Materials

Strong oxidizing agents.

10.6 Hazardous Decomposition Products

No data available

SECTION 11: Toxicological Information**11.1. Information on toxicological effects**

Acute toxicity	LD50 Oral-rat-5,045mg/kg (behavioural, altered sleep/general depressed activity) LC50 – Inhalation –rat- 8hr -16000ppm LD50 – Dermal –rabbit 12,800 mg/kg
Skin Corrosion	Skin-rabbit-Mild skin irritation
Serious eye damage/eye irritation	Eyes –rabbit-eye irritation- 24 hour
Respiratory or skin irritation	May cause an allergic skin reaction
Germ cell mutagenicity	No data available
Carcinogenicity	IARC- Group 3, Not classifiable as to its carcinogenicity to humans (2-propanol)
Reproductive toxicity	No data available
Specific target organ toxicity- Repeated exposure	May cause drowsiness and dizziness
Specific target organ toxicity	No data available
Aspiration hazard	No data available
Potential health effects	
Inhalation	May be harmful if inhaled. May cause respiratory tract irritation. Vapours may cause drowsiness and dizziness.
Ingestion	May be harmful if swallowed
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	Causes serious eye irritation.
Signs and Symptoms of Exposure	Central nervous system depression, prolonged and repeated exposure can cause, nausea, headache, vomiting, narcosis, drowsiness, over-exposure may cause mild, reversible liver effects.

SECTION 12: Ecological Information**12.1 Toxicity**

Toxicity to fish	LC50-Pimephales promelas (fathead minnow) -9,640.00mg/l-96h
Toxicity to daphnia and other aquatic invertebrates	EC50 – Daphnia magna (water flea)- 5,102.00mg/l-24h
Toxicity to algae	EC50-Desmodesmus subspicatus (green algae)->2,000.00mg/l-72h EC50 – Algae->1,000.00mg/l-24h

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

No data available

SECTION 13: Disposal Considerations**General Information**

Dispose of in compliance with all local and national regulations.

Disposal methods

Contact a licensed waste disposal company

Disposal and Packaging

Do NOT reuse empty containers. Empty containers can be sent for disposal and recycling.

Further Information

For disposal with the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.

SECTION 14: Transport Information**Hazard Pictograms**

**14.1. UN Number**

UN1219

14.2. UN Proper Shipping Name

ISOPROPANOL

14.3. Transport Hazard Class

ADR/RID	3
Subsidiary risk	-
IMDG	3
Subsidiary risk	-
IATA	3
Subsidiary risk	-

14.4. Packing Group

Packing Group II

14.5. Environmental Hazards

Environmental hazard	No
Marine Pollutant	No

ADR/RID

Hazard ID	33
Tunnel Category	D/E

IMDG

Ems Code	F-E-S-D
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IATA

Packing Instruction (Cargo)	364
Maximum quantity	60L
Packing Instruction (Passenger)	353
Maximum quantity	5L

SECTION 15: Regulatory Information

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

15.2 Chemical Safety Assessment – A chemical safety assessment has not been carried out for the mixture.

R37,38: Irritating to Respiratory system and skin

R41: Risk of serious damage to eyes

Regulations

Commission regulation (EU) No 453/2010 of the 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Regulation, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94. Council Directive 76/769/EEC and Commission Directive 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

Regulation (EC) No 1907/2006 of the European Parliament and of the council of 18 December 2006 concerning the Regulation, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Directive (EEC) No 793/93 and Commission Regulation (EC) No 1488/94. Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC. (93/105/EC) and 2000/21/EC.

SECTION 16: Other Information**Other Information**

None

Further Information

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information related only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.