

## SAFETY DATA SHEET SURFACE MOUNT FLUX PENS

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

#### 1.1. Product identifier

**Product name** SURFACE MOUNT FLUX PENS  
**Product No.** SMF,ESMF12P,ECPK000,ZE

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

**Application** Manufacture of electrical equipment  
**Uses advised against** At this moment in time we do not have information on use restrictions. They will be included in this safety data sheet when available

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

**Supplier** ELECTROLUBE. A division of HK WENTWORTH LTD  
 H K WENTWORTH PTY LIMITED  
 P.O. BOX 339  
 BROOKVALE, NSW 2100  
 AUSTRALIA  
 TEL: 02 9938 1566  
 FAX: 02 9938 1467  
 02 9938 1566  
 02 9938 1467  
 info@hkw.co.uk

#### 1.4. Emergency telephone number

**Emergency telephone** Tel: 029938 1566 between 8.30am and 5.00pm EST

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

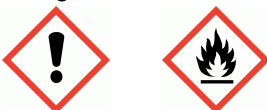
##### Classification

**Physical hazards** Flam. Liq. 2 - H225  
**Health hazards** Eye Irrit. 2 - H319 Skin Sens. 1 - H317 STOT SE 3 - H336  
**Environmental hazards** Not classified.

**Classification (67/548/EEC or 1999/45/EC)** Xi;R36. R43. F;R11. R67.

#### 2.2. Label elements

##### Pictogram



**Signal word** Danger

## SURFACE MOUNT FLUX PENS

<b>Hazard statements</b>	H225 Highly flammable liquid and vapour. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.
<b>Precautionary statements</b>	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P280 Wear protective gloves, eye and face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P313 Get medical advice/attention. P102 Keep out of reach of children.
<b>Contains</b>	PROPAN-2-OL, ROSIN
<b>Supplementary precautionary statements</b>	P261 Avoid breathing vapour/spray. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

### 2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

<b>PROPAN-2-OL</b> <span style="float: right;"><b>60-100%</b></span>	
CAS number: 67-63-0	EC number: 200-661-7
REACH registration number: 01-2119457558-25-XXXX	
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>
Flam. Liq. 2 - H225	F;R11 Xi;R36 R67
Eye Irrit. 2 - H319	
STOT SE 3 - H336	
<b>ROSIN</b> <span style="float: right;"><b>1-5%</b></span>	
CAS number: 8050-09-7	EC number: 232-475-7
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>
Skin Sens. 1 - H317	R43

The Full Text for all R-Phrases and Hazard Statements is Displayed in Section 16.

<b>Composition comments</b>	No classified ingredients, or those having occupational exposure limits, present above the levels of disclosure.
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## SECTION 4: First aid measures

### 4.1. Description of first aid measures

<b>Inhalation</b>	Not relevant.
<b>Ingestion</b>	Do not induce vomiting. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Get medical attention.
<b>Skin Contact</b>	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.

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**Eye contact** Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

**Inhalation** Vapours may cause drowsiness and dizziness.

**Ingestion** May cause discomfort if swallowed.

**Skin contact** Prolonged contact may cause redness, irritation and dry skin.

**Eye contact** May cause severe eye irritation.

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

**Notes for the doctor** Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media** Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

**Hazchem Code** Do not use water jet as an extinguisher, as this will spread the fire.

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

**Specific hazards** Oxides of the following substances: Carbon.

**Hazardous combustion products** Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

### 5.3. Advice for firefighters

**Protective actions during firefighting** Move containers from fire area if it can be done without risk. Use water to keep fire exposed containers cool and disperse vapours. Contain and collect extinguishing water.

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

## SECTION 6: Accidental release measures

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

**Personal precautions** Follow precautions for safe handling described in this safety data sheet. No smoking, sparks, flames or other sources of ignition near spillage. Take precautionary measures against static discharges. Provide adequate ventilation.

### 6.2. Environmental precautions

**Environmental precautions** Do not discharge into drains or watercourses or onto the ground.

### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** Absorb spillage with inert, damp, non-combustible material. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

### 6.4. Reference to other sections

**Reference to other sections** Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards. For waste disposal, see Section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

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**Usage precautions** Avoid spilling. Avoid contact with skin and eyes. Keep away from heat, sparks and open flame. Avoid inhalation of vapours and spray/mists.

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

**Storage precautions** Keep container tightly closed. Keep only in the original container. Keep away from heat, sparks and open flame.

**Storage class** Flammable liquid storage.

### 7.3. Specific end use(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

#### **PROPAN-2-OL**

Long-term exposure limit (8-hour TWA): 400 ppm 983 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): 500 ppm 1230 mg/m<sup>3</sup>

#### PROPAN-2-OL (CAS: 67-63-0)

<b>DNEL</b>	Industry - Dermal; : 888 mg/kg/day Industry - Inhalation; : 500 mg/m <sup>3</sup> Consumer - Dermal; : 319 mg/kg/day Consumer - Inhalation; : 89 mg/m <sup>3</sup> Consumer - Oral; : 26 mg/kg/day
<b>PNEC</b>	- Fresh water; 140.9 mg/l - Marine water; 140.9 mg/l - Sediment; 552 mg/kg - Soil; 28 mg/kg

### 8.2. Exposure controls

**Appropriate engineering controls** Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

**Eye/face protection** Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.

**Hand protection** It is recommended that chemical-resistant, impervious gloves are worn. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. It is recommended that gloves are made of the following material: Butyl rubber. To protect hands from chemicals, gloves should comply with European Standard EN374.

**Other skin and body protection** Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

**Hygiene measures** Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station. Do not smoke in work area. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap and water if skin becomes contaminated. When using do not eat, drink or smoke. Eating, smoking and water fountains prohibited in immediate work area.

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**Respiratory protection** No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. Wear a respirator fitted with the following cartridge: Combination filter, type A2/P3. Gas and combination filter cartridges should comply with European Standard EN14387.

### SECTION 9: Physical and Chemical Properties

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

<b>Appearance</b>	Liquid.
<b>Initial boiling point and range</b>	82 (179.6 F)°C @
<b>Flash point</b>	12 (53.6 F)°C OC (Open cup).
<b>Evaporation rate</b>	2.93
<b>Flammability Limit - Lower(%)</b>	: 2.30
<b>Vapour pressure</b>	4.4 kPa @ °C
<b>Vapour density</b>	2.8
<b>Relative density</b>	0.820 @ @ 20 °C (68 F)°C
<b>Auto-ignition temperature</b>	425°C
<b>Viscosity</b>	@ °C

#### 9.2. Other information

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

**Reactivity** The following materials may react with the product: Strong oxidising agents.

#### 10.2. Chemical stability

**Stability** Stable at normal ambient temperatures and when used as recommended.

#### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** Will not polymerise.

#### 10.4. Conditions to avoid

**Conditions to avoid** Avoid heat, flames and other sources of ignition. Avoid excessive heat for prolonged periods of time.

#### 10.5. Incompatible materials

**Materials to avoid** Strong oxidising agents.

#### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Skin sensitisation

**Skin sensitisation** Buehler test: - Guinea pig: Not sensitising.

##### Inhalation

May cause respiratory system irritation. Vapours may cause drowsiness and dizziness.

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<b>Ingestion</b>	May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication.
<b>Skin Contact</b>	Irritating to skin. Prolonged contact may cause dryness of the skin. Product has a defatting effect on skin. Repeated exposure may cause skin dryness or cracking. May cause allergic contact eczema.
<b>Eye contact</b>	Irritating to eyes.
<b>Route of entry</b>	Skin absorption Ingestion. Skin and/or eye contact
<b>Target Organs</b>	Central nervous system Eyes Respiratory system, lungs Skin
<b>Medical Symptoms</b>	Irritation of eyes and mucous membranes. Dilated pupils. Rhinitis (inflammation of the nasal mucous membranes). Upper respiratory irritation. General respiratory distress, unproductive cough. Skin irritation. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo.

### Toxicological information on ingredients.

#### PROPAN-2-OL

##### Acute toxicity - oral

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 4,700.0

**Species** Rat

**ATE oral (mg/kg)** 4,700.0

##### Acute toxicity - dermal

**Acute toxicity dermal (LD<sub>50</sub> mg/kg)** 12,800.0

**Species** Rabbit

##### Acute toxicity - inhalation

**Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l)** 46.5

**Species** Rat

**ATE inhalation (vapours mg/l)** 46.5

**Inhalation** Vapours may cause headache, fatigue, dizziness and nausea.

**Eye contact** Irritating to eyes.

**Acute and chronic health hazards** Irritation of eyes and mucous membranes. Narcotic effect. Central nervous system depression.

**Route of entry** Skin and/or eye contact Skin absorption Ingestion

**Target Organs** Central nervous system Eyes Skin Respiratory system, lungs

**Medical Symptoms** Irritation of eyes and mucous membranes. Dilated pupils. Rhinitis (inflammation of the nasal mucous membranes). General respiratory distress, unproductive cough. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo.

### SECTION 12: Ecological Information

## SURFACE MOUNT FLUX PENS

**Ecotoxicity** The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

### 12.1. Toxicity

**Toxicity** Not considered toxic to fish.

**Acute toxicity - fish** LC50, 96 hours, 96 hours: 9640 mg/l, Pimephales promelas (Fat-head Minnow)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours, 48 hours: 13299 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 72 hours, 72 hours: > 1.000 mg/l, Scenedesmus subspicatus

**Acute toxicity - microorganisms** EC<sub>50</sub>, >: > 1.000 mg/l, Activated sludge

### Ecological information on ingredients.

#### PROPAN-2-OL

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**Acute toxicity - aquatic plants** EC<sub>50</sub>, 72 hours, 72 hours: > 1.000 mg/l, Scenedesmus subspicatus

**Acute toxicity - microorganisms** EC<sub>50</sub>, >: > 1.000 mg/l, Activated sludge

### 12.2. Persistence and degradability

**Persistence and degradability** The product is biodegradable.

### Ecological information on ingredients.

#### PROPAN-2-OL

**Persistence and degradability** The product is readily biodegradable.

### 12.3. Bioaccumulative potential

**Bioaccumulative Potential** The product is not bioaccumulating.

### Ecological information on ingredients.

#### PROPAN-2-OL

**Bioaccumulative Potential** The product does not contain any substances expected to be bioaccumulating.

### 12.4. Mobility in soil

**Mobility** The product is soluble in water.

### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

### Ecological information on ingredients.

#### PROPAN-2-OL

## SURFACE MOUNT FLUX PENS

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

### 12.6. Other adverse effects

**Other adverse effects** Not determined.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**General information** Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Do not puncture or incinerate, even when empty. Materials such as cleaning rags and paper wipes that are contaminated with flammable liquids may self-ignite after use and should be stored in designated fireproof containers with tight-fitting, self-closing lids.

**Disposal methods** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

## SECTION 14: Transport information

### 14.1. UN number

UN No. Road	1219
UN No. Sea	1219
UN No., Air	1219
UN No. (ADN)	1219

### 14.2. UN proper shipping name

Proper shipping name (ADR/RID)	ISOPROPANOL (ISOPROPYL ALCOHOL)
Proper shipping name (IMDG)	ISOPROPANOL (ISOPROPYL ALCOHOL)
Proper shipping name (ICAO)	ISOPROPANOL (ISOPROPYL ALCOHOL)
Proper shipping name (ADN)	ISOPROPANOL (ISOPROPYL ALCOHOL)

### 14.3. Transport hazard class(es)

ADR Class No.	3
ADR/RID classification code	F1
ADR/RID label	3
IMDG Class	3
ICAO Class	3
ADN class	3

### Transport labels



### 14.4. Packing group

ADR Pack Group	II
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## SURFACE MOUNT FLUX PENS

IMDG packing group	II
ADN packing group	II
Air Pack Gr.	II

### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant  
No.

### 14.6. Special precautions for user

EmS	F-E, S-D
ADR transport category	2
Emergency Action Code	•2YE
Hazard Identification Number (ADR/RID)	33
Tunnel restriction code	(D/E)

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

## SECTION 15: Regulatory information

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

<b>EU legislation</b>	Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments. Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
<b>Guidance</b>	Workplace Exposure Limits EH40.
<b>Authorisations (Title VII Regulation 1907/2006)</b>	No specific authorisations are known for this product.
<b>Restrictions (Title VIII Regulation 1907/2006)</b>	No specific restrictions on use are known for this product.

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

## SECTION 16: Other information

Issued by	Toni Ashford
Revision date	30/10/2015

## SURFACE MOUNT FLUX PENS

<b>Revision</b>	2
<b>SDS No.</b>	10561
<b>Risk phrases in full</b>	R11 Highly flammable. R36 Irritating to eyes. R43 May cause sensitisation by skin contact. R67 Vapours may cause drowsiness and dizziness.
<b>Hazard statements in full</b>	H225 Highly flammable liquid and vapour. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.