

## SAFETY DATA SHEET

### SURFACE MOUNT FLUX PENS

#### 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

PRODUCT NAME SURFACE MOUNT FLUX PENS  
 PRODUCT NO. ESMF12P  
 SUPPLIER ELECTROLUBE. A division of HK  
 WENTWORTH LTD  
 KINGSBURY PARK, MIDLAND ROAD  
 SWADLINCOTE  
 DERBYSHIRE, DE11 0AN  
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#### 2 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
PROPAN-2-OL	200-661-7	67-63-0	60-100%	F;R11 Xi;R36 R67

The Full Text for all R-Phrases are Displayed in Section 16

#### COMPOSITION COMMENTS

Ingredients not listed are classified as non-hazardous or at a concentration below reportable levels

#### 3 HAZARDS IDENTIFICATION

Highly flammable. Irritating to eyes. Vapours may cause drowsiness and dizziness.

CLASSIFICATION Xi;R36. F;R11. R67.

#### 4 FIRST-AID MEASURES

##### INHALATION

Not relevant.

##### INGESTION

DO NOT INDUCE VOMITING! Provide fresh air, warmth and rest, preferably in comfortable upright sitting position. Rinse mouth thoroughly. Get medical attention.

##### SKIN CONTACT

Promptly wash contaminated skin with soap or mild detergent and water. Promptly remove clothing if soaked through and wash as above. Get medical attention if irritation persists after washing.

##### EYE CONTACT

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

#### 5 FIRE-FIGHTING MEASURES

##### EXTINGUISHING MEDIA

Use: Alcohol resistant foam. Powder. Dry chemicals, sand, dolomite etc.

##### SPECIAL FIRE FIGHTING PROCEDURES

Move container from fire area if it can be done without risk. Use water to keep fire exposed containers cool and disperse vapours.

#### 6 ACCIDENTAL RELEASE MEASURES

##### SPILL CLEAN UP METHODS

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Wear necessary protective equipment. Absorb in vermiculite, dry sand or earth and place into containers.

#### 7 HANDLING AND STORAGE

##### USAGE PRECAUTIONS

Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact.

##### STORAGE PRECAUTIONS

Flammable/combustible - Keep away from oxidisers, heat and flames. Store in tightly closed original container in a cool, dry well-ventilated place. Keep in original container.

#### 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**SURFACE MOUNT FLUX PENS**

Name	Std	LT - ppm	LT - mg/m3	ST - ppm	ST - mg/m3
PROPAN-2-OL	WEL	400 ppm	999 mg/m3	500 ppm	1250 mg/m3

**INGREDIENT COMMENTS**

WEL = Workplace Exposure Limits

**ENGINEERING MEASURES**

All handling to take place in well-ventilated area.

**RESPIRATORY EQUIPMENT**

No specific recommendation made, but respiratory protection must be used if the general level exceeds the Recommended Workplace Exposure Limit.

**HAND PROTECTION**

Use protective gloves. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

**EYE PROTECTION**

Wear approved, tight fitting safety glasses where splashing is probable.

**OTHER PROTECTION**

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

**HYGIENE MEASURES**

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap & water if skin becomes contaminated. When using do not eat, drink or smoke.

**9 PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE	Liquid	RELATIVE DENSITY	0.820 @ 20 °c
BOILING POINT (°C)	82	VISCOSITY	@ °c
VAPOUR PRESSURE	4.4 kPa @ 20 °c	AUTO IGNITION TEMPERATURE (°C)	425
FLASH POINT (°C)	12 OC (Open cup).	FLAMMABILITY LIMIT - UPPER(%)	12
FLAMMABILITY LIMIT - LOWER(%)	2.30		

**10 STABILITY AND REACTIVITY**

**STABILITY**

Stable under normal temperature conditions.

**CONDITIONS TO AVOID**

Avoid heat, flames and other sources of ignition.

**MATERIALS TO AVOID**

Strong oxidising substances.

**11 TOXICOLOGICAL INFORMATION**

TOXIC DOSE 1 - LD 50 1 4700 mg/kg (oral rat)

TOXIC CONC. - LC 50 46.5 mg/l/4h (inh-rat)

**INHALATION**

May cause irritation to the respiratory system.

**INGESTION**

May cause stomach pain or vomiting.

**SKIN CONTACT**

Prolonged contact may cause dryness of the skin. Acts as a defatting agent on skin. May cause cracking of skin, and eczema.

**EYE CONTACT**

Irritating to eyes.

**ROUTE OF ENTRY**

Skin absorption. Ingestion. Skin and/or eye contact.

**TARGET ORGANS**

Central nervous system. Eyes. Respiratory system, lungs. Skin.

**MEDICAL SYMPTOMS**

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.

**12 ECOLOGICAL INFORMATION**

**ECOTOXICITY**

Not regarded as dangerous for the environment.

LC 50, 96 Hrs, FISH mg/l 9600

**SURFACE MOUNT FLUX PENS**

IC 50, 72 Hrs, ALGAE, mg/l

1800

**13 DISPOSAL CONSIDERATIONS**

## DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements. Absorb in vermiculite or dry sand, dispose in licensed special waste.

**14 TRANSPORT INFORMATION**

UK ROAD CLASS	3		
PROPER SHIPPING NAME	ISOPROPANOL (ISOPROPYL ALCOHOL)		
UN NO. ROAD	1219	UK ROAD PACK GR.	II
ADR CLASS NO.	3	ADR CLASS	Class 3: Flammable liquids.
ADR PACK GROUP	II	HAZARD No. (ADR)	33
ADR LABEL NO.	3	HAZCHEM CODE	2YE
CEFIC TEC(R) NO.	30GF1-I+II	RID CLASS NO.	3
RID PACK GROUP	II	UN NO. SEA	1219
IMDG CLASS	3	IMDG PAGE NO.	3244
IMDG PACK GR.	II	EMS	F-E; S-D
MFAG	See Guide	MARINE POLLUTANT	No.
UN NO. AIR	1219	ICAO CLASS	3
AIR PACK GR.	II		

**15 REGULATORY INFORMATION**

## LABELLING



Irritant



Highly Flammable

## RISK PHRASES

R11	Highly flammable.
R36	Irritating to eyes.
R67	Vapours may cause drowsiness and dizziness.

## SAFETY PHRASES

S9	Keep container in a well-ventilated place.
S16	Keep away from sources of ignition - No smoking.
S25	Avoid contact with eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S51	Use only in well-ventilated areas.

## UK REGULATORY REFERENCES

Chemicals (Hazard Information & Packaging) Regulations.

## ENVIRONMENTAL LISTING

Rivers (Prevention of Pollution) Act 1961. Control of Pollution (Special Waste Regulations) Act 1980. Control of Pollution Act 1974.

## EU DIRECTIVES

System of specific information relating to Dangerous Preparations. 2001/58/EEC. Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EEC.

## APPROVED CODE OF PRACTICE

Classification and Labelling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for Substances and Preparations.

## GUIDANCE NOTES

Workplace Exposure Limits EH40.

**16 OTHER INFORMATION**

