



SAFETY DATA SHEET SURFACE MOUNT FLUX PENS

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

PRODUCT NAME SURFACE MOUNT FLUX PENS
PRODUCT NO. SMF
ESMF12P
EEPK000
ZE
APPLICATION Manufacture of electrical equipment
SUPPLIER ELECTROLUBE. A division of
HK WENTWORTH LTD
ASHBY PARK, COALFIELD
WAY,
ASHBY DE LA ZOUCH,
LEICESTERSHIRE LE65 1JR
UNITED KINGDOM
+44 (0)1530 419600
+44 (0)1530 416640
info@hkw.co.uk

2 HAZARDS IDENTIFICATION

Highly flammable.
Vapours may cause drowsiness and dizziness.
Irritating to eyes.
May cause sensitisation by skin contact.
CLASSIFICATION (1999/45) Xi;R36. R43. F;R11. R67.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content %	Classification (67/548/EEC)
PROPAN-2-OL	200-661-7	67-63-0	80-100%	F;R11 Xi;R36 R67
ROSIN	232-475-7	8050-09-7	1-5%	R43

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

COMPOSITION COMMENTS

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

4 FIRST-AID MEASURES

NOTES TO THE PHYSICIAN

Treat symptomatically

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

Remove contaminated clothing immediately and wash skin with soap and water. 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.

SURFACE MOUNT FLUX PENS

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

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. Dike and collect extinguishing water.

SPECIFIC HAZARDS

Oxides of: Carbon.

PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Follow precautions for safe handling described in this safety data sheet. Do not smoke, use open fire or other sources of ignition. Take precautionary measures against static discharges. Provide adequate ventilation.

ENVIRONMENTAL PRECAUTIONS

Do not discharge into drains, water courses or onto the ground.

SPILL CLEAN UP METHODS

Absorb with inert, damp, non-combustible material, then flush area with water. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Keep away from heat, sparks and open flame. Avoid inhalation of vapours and spray mists.

STORAGE PRECAUTIONS

Keep containers tightly closed. Keep in original container. Keep away from heat, sparks and open flame.

STORAGE CLASS

Flammable liquid storage.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
PROPAN-2-OL	WEL	400 ppm	999 mg/m ³	500 ppm	1250 mg/m ³	

WEL = Workplace Exposure Limit.

ENGINEERING MEASURES

Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of vapours.

RESPIRATORY EQUIPMENT

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational 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. Butyl rubber gloves are recommended.

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. Eating, smoking and water fountains prohibited in immediate work area.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid
BOILING POINT (°C)	82 (179.6 F)

SURFACE MOUNT FLUX PENS

RELATIVE DENSITY	0.820 @ 20 °C (68 F)
VAPOUR PRESSURE	4.4 kPa @ 20 °C (68 F)
VISCOSITY	@ °c
FLASH POINT (°C)	12 (53.6 F) OC (Open cup).
AUTO IGNITION	425
TEMPERATURE (°C)	
FLAMMABILITY LIMIT - LOWER(%)	2.30
FLAMMABILITY LIMIT - UPPER(%)	12

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use.

CONDITIONS TO AVOID

Avoid heat, flames and other sources of ignition. Avoid excessive heat for prolonged periods of time.

HAZARDOUS POLYMERISATION

Will not polymerise.

MATERIALS TO AVOID

Strong oxidising substances.

HAZARDOUS DECOMPOSITION PRODUCTS

Oxides of: Carbon.

11 TOXICOLOGICAL INFORMATION

INHALATION

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

INGESTION

May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication.

SKIN CONTACT

Irritating to skin. 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.

Name PROPAN-2-OL

12 ECOLOGICAL INFORMATION

ECOTOXICITY

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

MOBILITY

The product is soluble in water.

BIOACCUMULATION

Will not bio-accumulate.

DEGRADABILITY

The product is biodegradable.

ACUTE FISH TOXICITY

Not considered toxic to fish.

Name PROPAN-2-OL

13 DISPOSAL CONSIDERATIONS

SURFACE MOUNT FLUX PENS

GENERAL INFORMATION

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority. Do not puncture or incinerate even when empty. Rags and the like, moistened with flammable liquids, must be discarded into designated fireproof bucket.

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.

14 TRANSPORT INFORMATION



PROPER SHIPPING NAME	ISOPROPANOL (ISOPROPYL ALCOHOL)
PROPER SHIPPING NAME	CONSUMER COMMODITY
ENVIRONMENTALLY HAZARDOUS SUBSTANCE/MARINE POLLUTANT	No.
UN NO. ROAD	1219
ADR CLASS NO.	3
ADR CLASS	Class 3: Flammable liquids.
ADR PACK GROUP	II
TUNNEL RESTRICTION CODE	(D/E)
HAZARD No. (ADR)	33
ADR LABEL NO.	3
HAZCHEM CODE	•2YE
UN NO. SEA	1219
IMDG CLASS	3
IMDG PACK GR.	II
EMS	F-E, S-D
UN NO. AIR	1219
AIR CLASS	3
AIR PACK GR.	II

15 REGULATORY INFORMATION

LABELLING



Irritant



Highly Flammable

CONTAINS

ROSIN

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

S9	Keep container in a well-ventilated place.
S16	Keep away from sources of ignition - No smoking.
S24/25	Avoid contact with skin and eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37	Wear suitable gloves.

SURFACE MOUNT FLUX PENS

S51	Use only in well-ventilated areas.
S60	This material and its container must be disposed of as hazardous waste.

UK REGULATORY REFERENCES

Chemicals (Hazard Information & Packaging) Regulations.
The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.

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/EC.
Dangerous Substance Directive 67/548/EEC.
Dangerous Preparations Directive 1999/45/EC.
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.
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), 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 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

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

REVISION COMMENTS

Revised in accordance with CHIP3 and EU Directives 1999/45/EC and 2001/58/EC

ISSUED BY

Helen O'Reilly

REVISION DATE NOVEMBER 2010

REV. NO./REPL. SDS 5

GENERATED

SDS NO. 10561

RISK PHRASES IN FULL

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

DISCLAIMER

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.