

SAFETY DATA SHEET LEAD FREE CONFORMAL COATING

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

PRODUCT NAME LEAD FREE CONFORMAL COATING
PRODUCT NO. ELFCC400D
APPLICATION Manufacture of electrical equipment
SUPPLIER ELECTROLUBE. A division of HK
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2 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
1-METHOXY-2-PROPANOL	203-539-1	107-98-2	5-10%	R10
CYCLOHEXANE	203-806-2	110-82-7	10-30%	F;R11 Xn;R65 Xi;R38 R67 N;R50/53
DIMETHYL ETHER	204-065-8	115-10-6	30-60%	F+;R12
HEPTANE	205-563-8	142-82-5	1-5%	F;R11 Xn;R65 Xi;R38 R67 N;R50/53
HEXANE MIXTURE OF ISOMERS (MAX 5% n-HEXANE (203-777-6))			1-5%	F;R11 Xn;R65 Xi;R38 R67 N;R51/53
HEXANE-norm	203-777-6	110-54-3	< 1%	F;R11 Repr3;R62 Xn;R65,R48/20 Xi;R38 R67 N;R51/53
XYLENE	215-535-7	1330-20-7	10-30%	R10 Xn;R20/21 Xi;R38

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

Extremely flammable. Irritating to skin. Harmful by inhalation and in contact with skin. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CLASSIFICATION Xn;R20/21. Xi;R38. F+;R12. N;R51/53.

4 FIRST-AID MEASURES

INHALATION

Move the exposed person to fresh air at once. Keep the affected person warm and at rest. Get prompt medical attention.

INGESTION

Rinse mouth thoroughly. Provide rest, warmth and fresh air.

SKIN CONTACT

Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.

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: Powder. Dry chemicals, sand, dolomite etc. Water spray, fog or mist.

SPECIAL FIRE FIGHTING PROCEDURES

Containers close to fire should be removed or cooled with water. Use water to keep fire exposed containers cool and disperse vapours.

LEAD FREE CONFORMAL COATING

UNUSUAL FIRE & EXPLOSION HAZARDS

Aerosol cans may explode in a fire.

6 ACCIDENTAL RELEASE MEASURES

SPILL CLEAN UP METHODS

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. 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

Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	Std	LT - ppm	LT - mg/m3	ST - ppm	ST - mg/m3
1-METHOXY-2-PROPANOL	WEL	100 ppm(Sk)	375 mg/m3(Sk)	150 ppm(Sk)	560 mg/m3(Sk)
CYCLOHEXANE	WEL	100 ppm	350 mg/m3	300 ppm	1050 mg/m3
DIMETHYL ETHER	WEL	400 ppm	766 mg/m3	500 ppm	958 mg/m3
HEPTANE	WEL	500 ppm			
XYLENE	WEL	50 ppm(Sk)	220 mg/m3(Sk)	100 ppm(Sk)	441 mg/m3(Sk)

INGREDIENT COMMENTS

WEL = Workplace Exposure Limits

PROTECTIVE EQUIPMENT



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 suitable protective gloves if risk of skin contact. 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

Use eye protection.

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. When using do not eat, drink or smoke.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Aerosol Liquid

COLOUR Colourless

ODOUR Solvent.

VOLATILITY DESCRIPTION Volatile.

SOLUBILITY Insoluble in water

BOILING POINT (°C) 137 - 143

MELTING POINT (°C)

-24

LEAD FREE CONFORMAL COATING

RELATIVE DENSITY	0.780	FLASH POINT (°C)	25 OC (Open cup).
AUTO IGNITION TEMPERATURE (°C)	480	FLAMMABILITY LIMIT - LOWER(%)	1.1
FLAMMABILITY LIMIT - UPPER(%)	7		

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions.

CONDITIONS TO AVOID

Avoid heat, flames and other sources of ignition. Avoid contact with: Strong oxidising agents. Strong alkalis. Strong mineral acids.

HAZARDOUS DECOMPOSITION PRODUCTS

Fire creates: Vapours/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO2).

11 TOXICOLOGICAL INFORMATION

INHALATION

Harmful by inhalation. High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting. Vapours may cause headache, fatigue, dizziness and nausea. Prolonged inhalation of high concentrations may damage respiratory system.

SKIN CONTACT

Harmful in contact with skin. Irritating to skin. May cause allergic contact eczema. Product has a defatting effect on skin. Prolonged contact may cause dryness of the skin.

EYE CONTACT

Irritating to eyes.

Other Health Effects

This substance has no evidence of carcinogenic properties.

ROUTE OF ENTRY

Inhalation.

12 ECOLOGICAL INFORMATION

ECOTOXICITY

Dangerous for the environment if discharged into watercourses.

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Empty containers must not be burned because of explosion hazard. Dispose of waste and residues in accordance with local authority requirements.

14 TRANSPORT INFORMATION



UK ROAD CLASS	2		
PROPER SHIPPING NAME	AEROSOLS		
UN NO. ROAD	1950	UK ROAD PACK GR.	#
ADR CLASS NO.	2	ADR CLASS	Class 2: Gases
ADR PACK GROUP	#	ADR LABEL NO.	2.1
CEFIC TEC(R) NO.	20G5F	RID CLASS NO.	2
RID PACK GROUP	#	UN NO. SEA	1950
IMDG CLASS	2.1	IMDG PACK GR.	#
EMS	F-D, S-U	MFAG	See Guide
MARINE POLLUTANT	No.	UN NO. AIR	1950

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AIR CLASS 2.1 AIR PACK GR. #

15 REGULATORY INFORMATION

LABELLING



Harmful



Extremely Flammable



Dangerous for the environment

CONTAINS

XYLENE

RISK PHRASES

R12	Extremely flammable.
R38	Irritating to skin.
R20/21	Harmful by inhalation and in contact with skin.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SAFETY PHRASES

S2	Keep out of the reach of children
S16	Keep away from sources of ignition - No smoking.
S23	Do not breathe vapour/spray.
S24	Avoid contact with skin.
S38	In case of insufficient ventilation, wear suitable respiratory equipment.
S36/37	Wear suitable protective clothing and gloves.
A1	Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.
A2	Do not spray on a naked flame or any incandescent material.

UK REGULATORY REFERENCES

Chemicals (Hazard Information & Packaging) Regulations. The Control of Substances Hazardous to Health Regulations 1988.

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.

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

MAY 2007

REV. NO./REPL. SDS GENERATED

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SDS NO.

11999

LEAD FREE CONFORMAL COATING

RISK PHRASES IN FULL

R10	Flammable.
R11	Highly flammable.
R12	Extremely flammable.
R20/21	Harmful by inhalation and in contact with skin.
R38	Irritating to skin.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R62	Possible risk of impaired fertility.
R65	Harmful: may cause lung damage if swallowed.
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.