

SAFETY DATA SHEET FLUOROCOAT THIN FILM COATING

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name FLUOROCOAT THIN FILM COATING
Product No. TFCF, ETFCF250, ETFCF05L, ZE

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

Identified uses Conformal coating for appliance protection
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
 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

1.4. Emergency telephone number

+44 (0)1530 419600 between 8.30am - 5.00pm GMT Mon – Fri

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Flam. Liq. 2 - H225
Human health	Skin Irrit. 2 - H315; STOT SE 3 - H336; Asp. Tox. 1 - H304
Environment	Aquatic Chronic 2 - H411

Classification (1999/45/EEC)

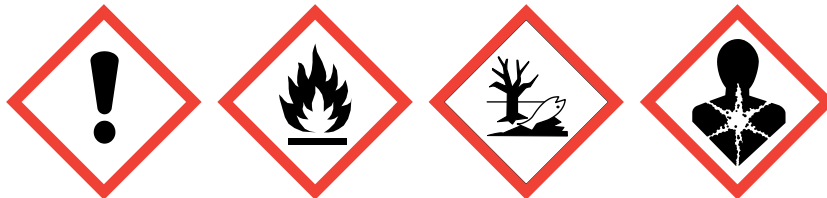
Xn;R65. Xi;R38. F;R11. N;R51/53. R67.

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

2.2. Label elements

Contains C7-C10 ISO-ALKANES

Label In Accordance With (EC) No. 1272/2008



Signal Word

Danger

Hazard Statements

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.

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Precautionary Statements	H411	Toxic to aquatic life with long lasting effects.
	P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
	P280	Wear protective gloves, eye and face protection.
Supplementary Precautionary Statements	P261	Avoid breathing vapour/spray.
	P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P331	Do NOT induce vomiting.
	P332+313	If skin irritation occurs: Get medical advice/attention.

2.3. Other hazards

Not Classified as PBT/vPvB by current EU criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

C7-C10 ISO-ALKANES	80-100%
CAS-No.: 90622-56-3	EC No.: 292-458-5
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Xn;R65. Xi;R38. F;R11. N;R51/53. R67.

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

Composition Comments

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

SECTION 4: FIRST AID MEASURES

4.1. Description of 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. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Provide rest, warmth and fresh air. Get medical attention immediately!

Skin contact

Wash the skin immediately 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. Contact physician if irritation persists.

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

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

Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Fire can be extinguished using: Foam. Dry chemicals, sand, dolomite etc.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

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Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

Specific hazards

The product is flammable, and heating may generate vapours which may form explosive vapour/air mixtures.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Avoid breathing fire vapours. Cool containers exposed to flames with water until well after the fire is out.

Protective equipment for fire-fighters

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

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

6.4. 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. Collect and dispose of spillage as indicated in section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

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

7.2. Conditions for safe storage, including any incompatibilities

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

Storage Class

Flammable liquid storage.

7.3. 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

Name	STD	TWA - 8 Hrs	STEL - 15 Min	Notes
C7-C10 ISO-ALKANES	WEL	1200 mg/m ³		

WEL = Workplace Exposure Limit.

8.2. Exposure controls

Protective equipment



Process conditions

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station.

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Engineering measures

All handling to take place in well-ventilated area. Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Respiratory equipment

In case of inadequate ventilation and work of brief duration, use suitable respiratory equipment. It is recommended to use respiratory equipment with combination filter, type A2/P3. EN14387

Hand protection

Protective gloves should be used if there is a risk of direct contact or splash. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Nitrile gloves are recommended. Gloves should conform to EN374

Eye protection

Use approved safety goggles or face shield. EN166

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 hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap & water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Colourless.
Odour	Characteristic.
Initial boiling point and boiling range (°C)	>110 (>230 F)
Melting point (°C)	-20 (-4 F)
Relative density	0.724 @ 15 °c (68 F)
Vapour pressure	1.9 kPa @ 20 °c (68 F)
Viscosity	0.62 mPas @ 25 °c (77 F)
Flash point (°C)	7 (44.6 F)
Auto Ignition Temperature (°C)	380 (716 F)
Flammability Limit - Lower(%)	0.7
Flammability Limit - Upper(%)	6.0

9.2. Other information

None.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

Not determined.

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid heat. Avoid contact with oxidisers or reducing agents.

10.5. Incompatible materials

Materials To Avoid

Strong acids. Strong alkalis. Strong oxidising substances.

10.6. Hazardous decomposition products

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

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information

No information available.

Other Health Effects

This substance has no evidence of carcinogenic properties.

Inhalation

May cause irritation to the respiratory system. Vapours may cause headache, fatigue, dizziness and nausea.

Ingestion

Harmful: may cause lung damage if swallowed.

Skin contact

Irritating to skin. Prolonged contact may cause dryness of the skin.

Eye contact

Irritating to eyes.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product contains substances which are toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

12.1. Toxicity

12.2. Persistence and degradability

Degradability

There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

13.1. Waste treatment methods

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

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN)	1993
UN No. (IMDG)	1993
UN No. (ICAO)	1993

14.2. UN proper shipping name

FLUOROCOAT THIN FILM COATING

Proper Shipping Name FLAMMABLE LIQUID, N.O.S. (C7-C10 ISO-ALKANES, NAPHTHA (PETROLEUM),)

14.3. Transport hazard class(es)

ADR/RID/ADN Class 3
ADR/RID/ADN Class Class 3: Flammable liquids.
ADR Label No. 3
IMDG Class 3
ICAO Class/Division 3
Transport Labels



14.4. Packing group

ADR/RID/ADN Packing group II
IMDG Packing group II
ICAO Packing group II

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant



14.6. Special precautions for user

EMS F-E, S-E
Emergency Action Code •3YE
Hazard No. (ADR) 33
Tunnel Restriction Code (D/E)

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

No information required.

SECTION 15: REGULATORY INFORMATION

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

Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716). Control of Substances Hazardous to Health.

Guidance Notes

Workplace Exposure Limits EH40.

EU Legislation

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.

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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.

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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

Authorisations (Title VII Regulation 1907/2006)

No specific authorisations are noted for this product.

Restrictions (Title VIII Regulation 1907/2006)

No specific restrictions of use are noted for this product.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Issued By	Helen O'Reilly
Revision Date	APRIL 2013
Revision	6
SDS No.	10607
Risk Phrases In Full	
R65	Harmful: may cause lung damage if swallowed.
R11	Highly flammable
R38	Irritating to skin.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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.