



SAFETY DATA SHEET

FLUXCLENE

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

PRODUCT NAME FLUXCLENE

PRODUCT NO. EFLU01L/ 05L/ 25L

SUPPLIER ELECTROLUBE. A division of
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2 HAZARDS IDENTIFICATION

Highly flammable.

Vapours may cause drowsiness and dizziness.

Harmful: may cause lung damage if swallowed.

Irritating to eyes and skin.

May cause sensitisation by skin contact.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CLASSIFICATION Xn;R65. Xi;R36/38. R43. F;R11. N;R50/53. R67.

3 COMPOSITION/INFORMATION ON INGREDIENTS

| Name | EC No. | CAS-No. | Content | Classification |
|--|-----------|-----------|---------|--|
| CYCLOHEXANE | 203-806-2 | 110-82-7 | 30-60% | F;R11 Xn;R65 Xi;R38 R67 N;R50/53 |
| PROPAN-2-OL | 200-661-7 | 67-63-0 | 10-30% | F;R11 Xi;R36 R67 |
| 1-METHOXY-2-PROPANOL | 203-539-1 | 107-98-2 | 10-30% | R10 |
| HEXANE MIXTURE OF ISOMERS (MAX 5% n-HEXANE (203-777-6)) | | | 5-10% | F;R11 Xn;R65 Xi;R38 R67 N;R51/53 |
| HEPTANE | 205-563-8 | 142-82-5 | 1-5% | F;R11 Xn;R65 Xi;R38 R67 N;R50/53 |
| d-LIMONENE | 227-813-5 | 5989-27-5 | 1-5% | R10 R43 Xi;R38 N;R50/53 |
| HEXANE-norm | 203-777-6 | 110-54-3 | < 1% | F;R11 Repr3;R62 Xn;R65,R48/20 Xi;R38 R67 N;R51/53 |

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

4 FIRST-AID MEASURES

NOTES TO THE PHYSICIAN

Treat symptomatically

INHALATION

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

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INGESTION

DO NOT INDUCE VOMITING! Rinse mouth thoroughly. Provide rest, warmth and fresh air. Get medical attention immediately!

SKIN CONTACT

Remove affected person from source of contamination. 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.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

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

SPECIAL FIRE FIGHTING PROCEDURES

Avoid breathing fire vapours. Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Dike for water control.

6 ACCIDENTAL RELEASE MEASURES

SPILL CLEAN UP METHODS

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Clean-up personnel should use respiratory and/or liquid contact protection. Absorb in vermiculite, dry sand or earth and place into containers.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Keep away from heat, sparks and open flame. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Use explosion proof electric equipment.

STORAGE PRECAUTIONS

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.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

| Name | Std | TWA - 8 hrs | | STEL - 15 min | | Notes |
|----------------------|-----|-------------|---------------|---------------|---------------|-------|
| 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 | |
| HEPTANE | WEL | 500 ppm | | | | |
| PROPAN-2-OL | WEL | 400 ppm | 999 mg/m3 | 500 ppm | 1250 mg/m3 | |

WEL = Workplace Exposure Limit.

INGREDIENT COMMENTS

WEL = Workplace Exposure Limits

PROTECTIVE EQUIPMENT



ENGINEERING MEASURES

Provide adequate ventilation. Observe Workplace Exposure Limits and minimise the risk of inhalation of vapours.

RESPIRATORY EQUIPMENT

In case of inadequate ventilation and work of brief duration, use suitable respiratory equipment.

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.

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EYE PROTECTION

Wear approved chemical safety goggles where eye exposure is reasonably 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. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

9 PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|-------------------------------|---|--------------------------------|---------------|
| APPEARANCE | Liquid Clear | | |
| COLOUR | Colourless | | |
| ODOUR | Organic solvents. | | |
| SOLUBILITY | Insoluble in water Soluble in Acetone Miscible with Alcohol Chloroform Ether. | | |
| BOILING POINT (°C) | >80 (>176 F) | RELATIVE DENSITY | 0.78 @ 20 °c |
| FLASH POINT (°C) | 0 (32 F) CC (Closed cup). | AUTO IGNITION TEMPERATURE (°C) | >200 (>392 F) |
| FLAMMABILITY LIMIT - LOWER(%) | 0.7 | FLAMMABILITY LIMIT - UPPER(%) | 8.3 |

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions.

CONDITIONS TO AVOID

Avoid heat. Avoid contact with oxidisers or reducing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

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

11 TOXICOLOGICAL INFORMATION

INHALATION

Vapours may cause headache, fatigue, dizziness and nausea. High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting.

INGESTION

Harmful: may cause lung damage if swallowed.

SKIN CONTACT

Irritating to skin. May cause sensitisation by skin contact. Product has a defatting effect on skin. Prolonged contact may cause dryness of the skin.

EYE CONTACT

Irritating to eyes.

ROUTE OF ENTRY

Inhalation. Skin absorption.

| | |
|----------------------|--------------------------|
| Name | HEPTANE |
| Toxic Dose 1 - LD 50 | 222 mg/kg (ivn-mouse) |
| Toxic Conc. - LC 50 | 103 ppm/4h (inh-rat) |
| Name | CYCLOHEXANE |
| Toxic Dose 1 - LD 50 | 12705 mg/kg (oral rat) |
| Toxic Dose 2 - LD 50 | 813 mg/kg (oral-mouse) |
| Name | PROPAN-2-OL |
| Toxic Dose 1 - LD 50 | 5045 mg/kg (oral rat) |
| Toxic Dose 2 - LD 50 | 3600 mg/kg (oral-mouse) |
| Toxic Conc. - LC 50 | 47-73 mg/l/4h (inh-rat) |
| Name | 1-METHOXY-2-PROPANOL |
| Toxic Dose 1 - LD 50 | 5200 mg/kg (oral rat) |
| Toxic Dose 2 - LD 50 | 11700 mg/kg (oral-mouse) |

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Name d-LIMONENE
Toxic Dose 1 - LD 50 >5000 mg/kg (oral rat)

12 ECOLOGICAL INFORMATION

ECOTOXICITY

Dangerous for the environment if discharged into watercourses.

| | |
|------------------------------|----------------------|
| Name | HEPTANE |
| LC 50, 96 Hrs, FISH mg/l | 4.924 |
| Name | CYCLOHEXANE |
| LC 50, 96 Hrs, FISH mg/l | 42.3 |
| Name | PROPAN-2-OL |
| LC 50, 96 Hrs, FISH mg/l | 9600 |
| EC 50, 48 Hrs, DAPHNIA, mg/l | 10000 |
| Name | 1-METHOXY-2-PROPANOL |
| LC 50, 96 Hrs, FISH mg/l | 20800 |
| EC 50, 48 Hrs, DAPHNIA, mg/l | 23300 |
| Name | d-LIMONENE |
| EC 50, 48 Hrs, DAPHNIA, mg/l | 12.3 |
| Mobility | |

The product has poor water-solubility.

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

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

14 TRANSPORT INFORMATION



| | | | |
|----------------------|---|------------------|-----------------------------|
| UK ROAD CLASS | 3 | | |
| PROPER SHIPPING NAME | FLAMMABLE LIQUID, N.O.S. (CYCLOHEXANE, PROPAN-2-OL) | | |
| UN NO. ROAD | 1993 | 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 | 3YE |
| CEFIC TEC(R) NO. | 30GF1-I+II, 30GF1-sp | RID CLASS NO. | 3 |
| RID PACK GROUP | II | UN NO. SEA | 1993 |
| IMDG CLASS | 3 | IMDG PAGE NO. | 3230 |
| IMDG PACK GR. | II | EMS | F-E, S-E |
| MFAG | See Guide | MARINE POLLUTANT | No. |
| UN NO. AIR | 1993 | AIR CLASS | 3 |
| AIR PACK GR. | II | | |

15 REGULATORY INFORMATION

SYMBOLS



Harmful



Highly Flammable



Dangerous for the environment

FLUXCLENE

CONTAINS CYCLOHEXANE
d-LIMONENE

RISK PHRASES

| | |
|--------|--|
| R11 | Highly flammable. |
| R43 | May cause sensitisation by skin contact. |
| R36/38 | Irritating to eyes and skin. |
| R50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| R67 | Vapours may cause drowsiness and dizziness. |
| R65 | Harmful: may cause lung damage if swallowed. |

SAFETY PHRASES

| | |
|--------|---|
| S9 | Keep container in a well-ventilated place. |
| S16 | Keep away from sources of ignition - No smoking. |
| S51 | Use only in well-ventilated areas. |
| S24/25 | Avoid contact with skin and eyes. |
| S62 | If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. |

UK REGULATORY REFERENCES

Chemicals (Hazard Information & Packaging) Regulations.

The Control of Substances Hazardous to Health Regulations 1988.

ENVIRONMENTAL LISTING

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

EU DIRECTIVES

Dangerous Substance Directive 67/548/EEC.

Dangerous Preparations Directive 1999/45/EC.

System of specific information relating to Dangerous Preparations. 2001/58/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 2008

REV. NO./REPL. SDS 4

GENERATED

SDS NO. 10368

FLUXCLENE

RISK PHRASES IN FULL

| | |
|--------|--|
| R10 | Flammable. |
| R11 | Highly flammable. |
| R36 | Irritating to eyes. |
| R38 | Irritating to skin. |
| R43 | May cause sensitisation by skin contact. |
| 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.