

according to WHS Regulations

Printing date 19.03.2024

Version number 4

Revision: 19.03.2024

1 Identification

- **Product identifier**
- **Trade name:** 836LFNC
- **Other Means of Identification:** Liquid Flux: Lead Free, No Clean
- **Related Part Number:** 836LFNC, 836LFNC-1L, 836LFNC-4L, 836LFNC-P
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Details of the supplier of the safety data sheet** M.G. Chemicals Ltd.
- **Manufacturer/Supplier:**

MG Chemicals Ltd. (Head Office)
1210 Corporate Drive
Burlington, Ontario L7L 5R6
CANADA
+(1) 800-340-0772

Mektronics Australia Pty Ltd
5 Prince William Drive
Seven Hills
NSW 2147
Australia
www.mektronics.com.au
sales@mektronics.com.au

- **Further information obtainable from:** sds@mgchemicals.com
- **Emergency telephone number:**
CHEMTREC Australia: + (61) 2-9037-2994
Other emergency telephone number: +(1) 703-527-3887

2 Hazard(s) Identification

- **Classification of the substance or mixture**



Flam. Liq. 2

H225 Highly flammable liquid and vapour.



Serious eye damage/irritation – Category 2A H319 Causes serious eye irritation.

STOT SE 3

H336 May cause drowsiness or dizziness.

- **Label elements**
- **GHS label elements**

The product is classified and labelled according to the Globally Harmonised System (GHS).

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· **Hazard pictograms**

GHS02 GHS07

· **Signal word** Danger· **Hazard-determining components of labelling:**

propan-2-ol (10–30 %)

· **Hazard statements**

Highly flammable liquid and vapour.

Causes serious eye irritation.

May cause drowsiness or dizziness.

· **Precautionary statements**

Keep out of reach of children.

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Keep cool.

Use only outdoors or in a well-ventilated area.

In case of fire: Use CO₂, powder or water spray to extinguish.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Other hazards**· **Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.* **3 Composition and Information on Ingredients**· **Chemical characterisation: Mixtures**· **Description:** Mixture of substances listed below with nonhazardous additions.· **Dangerous components:**

64-17-5 ethanol 65-85%

⚠ Flam. Liq. 2, H225; ⚠ Serious eye damage/irritation – Category 2A, H319

67-63-0 propan-2-ol 10-30%

⚠ Flam. Liq. 2, H225; ⚠ Serious eye damage/irritation – Category 2A, H319; STOT SE 3, H336

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.**4 First Aid Measures**· **After inhalation:** Supply fresh air; consult doctor in case of complaints.· **After skin contact:** Generally the product does not irritate the skin.· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** If symptoms persist consult doctor.· **Information for doctor:**· **Most important symptoms and effects, both acute and delayed**

No further relevant information available.

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- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire Fighting Measures

- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**
Vapors are heavier than air. Vapors may travel to sources of ignition near the ground. They can cause flash fire or ignite explosively.
- **Protective equipment:** No special measures required.

6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and Storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls and personal protection

- **Additional information about design of technical facilities:**
No further data; see section 7.
- **Ingredients with limit values that require monitoring at the workplace:**
64-17-5 ethanol
WES Long-term value: 1880 mg/m³, 1000 ppm

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67-63-0 propan-2-olWES Short-term value: 1230 mg/m³, 500 ppmLong-term value: 983 mg/m³, 400 ppm· **Additional information:** The lists valid during the making were used as basis.· **Personal protective equipment:**· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· **Respiratory protection:** Not required.· **Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**

Tightly sealed goggles

9 Physical and Chemical Properties

· **General Information**· **Appearance:**· **Form:**

Fluid

· **Colour:**

According to product specification

· **Odour:**

Characteristic

· **Odour threshold:**

Not determined.

· **pH-value:**

Not determined.

· **Change in condition**· **Melting point/freezing point:**

Undetermined.

· **Initial boiling point and boiling range:** 78 °C· **Flash point:**

12 °C

· **Flammability (solid, gas):**

Highly flammable.

· **Auto-ignition temperature:**

365 °C

· **Decomposition temperature:**

Not determined.

· **Ignition temperature:**

Product is not selfigniting.

· **Explosive properties:**

Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

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· Explosion limits:	
· Lower:	2 Vol %
· Upper:	15 Vol %
· Vapour pressure at 20 °C:	59 hPa
· Vapour pressure at 50 °C:	280 hPa
· Density at 20 °C:	0.81 g/cm ³
· Bulk density:	515–1,209 kg/m ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
· water:	Fully miscible.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
· Dynamic:	Not determined.
· Kinematic at 20 °C:	<3 mm ² /s
· Solvent content:	
· Organic solvents:	75–115 %
· VOC (EC)	75–115 %
· Solids content:	0.0 %
· Other information	No further relevant information available.

10 Stability and Reactivity

- **Reactivity** No further relevant information available.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological Information

- **Information on toxicological effects**
 - **Acute toxicity** Based on available data, the classification criteria are not met.
 - **LD/LC50 values relevant for classification:**
-
- 64-17-5 ethanol**
- Oral LD50 7,060 mg/kg (rat)
Inhalative LC50/4 h 20,000 mg/l (rat)
- 67-63-0 propan-2-ol**
- Oral LD50 5,045 mg/kg (rat)
Dermal LD50 12,800 mg/kg (rabbit)
Inhalative LC50/4 h 30 mg/l (rat)
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
 - **Serious eye damage/irritation** Causes serious eye irritation.
 - **Respiratory or skin sensitisation**
Based on available data, the classification criteria are not met.
 - **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
 - **Carcinogenicity** Based on available data, the classification criteria are not met.
 - **Reproductive toxicity** Based on available data, the classification criteria are not met.

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- **STOT-single exposure** May cause drowsiness or dizziness.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

12 Ecological Information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

- | | |
|----------------------------------|--|
| · UN-Number | UN1987 |
| · ADG, IMDG, IATA | |
| · UN proper shipping name | 1987 ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), ISOPROPANOL (ISOPROPYL ALCOHOL)) |
| · ADG | |
| · IMDG | ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), ISOPROPANOL (ISOPROPYL ALCOHOL)) |
| · IATA | Alcohols, n.o.s. (ETHANOL, ISOPROPANOL (ISOPROPYL ALCOHOL)) |

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· **Transport hazard class(es)**· **ADG, IMDG, IATA**

· Class	3 Flammable liquids.
· Label	3
· Packing group	
· ADG, IMDG, IATA	II
· Environmental hazards:	Not applicable.
· Special precautions for user	Warning: Flammable liquids.
· Hazard identification number (Kemler code):	33
· EMS Number:	F-E,S-D
· Stowage Category	B
· Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.

· **Transport/Additional information:**· **ADG**· **Limited quantities (LQ)**· **Excepted quantities (EQ)**

1L

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **Transport category**

2

· **Tunnel restriction code**

D/E

· **IMDG**· **Limited quantities (LQ)**· **Excepted quantities (EQ)**

1L

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **UN "Model Regulation":**

UN 1987 ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), ISOPROPANOL (ISOPROPYL ALCOHOL)), 3, II

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**· **Australian Inventory of Industrial Chemicals**

All ingredients are listed.

· **Standard for the Uniform Scheduling of Medicines and Poisons**

None of the ingredients is listed.

· **Australia: Priority Existing Chemicals**

None of the ingredients is listed.

· **GHS label elements**

The product is classified and labelled according to the Globally Harmonised System (GHS).

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· **Hazard pictograms**

GHS02 GHS07

· **Signal word** Danger· **Hazard-determining components of labelling:**

propan-2-ol (10–30 %)

· **Hazard statements**

Highly flammable liquid and vapour.

Causes serious eye irritation.

May cause drowsiness or dizziness.

· **Precautionary statements**

Keep out of reach of children.

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Keep cool.

Use only outdoors or in a well-ventilated area.

In case of fire: Use CO₂, powder or water spray to extinguish.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Directive 2012/18/EU**· **Named dangerous substances - ANNEX I** None of the ingredients is listed.· **Seveso category** P5c FLAMMABLE LIQUIDS· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5,000 t· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50,000 t· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

· **Department issuing SDS:** Product safety department.· **Contact:** sds@mgchemicals.com· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Serious eye damage/irritation – Category 2A: Serious eye damage/eye irritation – Category 2A

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STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
* **Data compared to the previous version altered.**

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