1. Identification

1110844 Product Code

2-ETHOXYETHANOL pure Product Name

 $C_2H_5OCH_2CH_2OH = 90.12$ Molecular Formula

110-80-5 CAS Number

Supplier:

CAMLAB LIMITED

Norman Way Industrial Estate Over Cambridge England CB4 5WE

01954 233110 Phone 01954 233101 Fax

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> 24hr 112 (Have this document to hand)

2. Composition

Component	CAS No	EEC No	Conc w/w	Classification & Risk Phrases	Exp (See 8.1)
2-Ethoxyethanol	110-80-5	203-804-1	> 99.0%	T : R60,R61,R10,R20/21/22	WEL

3. Hazards Identification



May impair fertility. May cause harm to the unborn child. Flammable. Harmful by inhalation, in contact with skin and if swallowed.

4. First Aid Measures

Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open.

If discomfort persists OBTAIN MEDICAL ATTENTION.

Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash Skin

before re-use. If discomfort persists OBTAIN MEDICAL ATTENTION.

Inhalation Remove from exposure. Keep warm and at rest. If there is difficulty in breathing give

oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION

Ingestion If conscious give plenty of water to drink. Do not induce vomiting. If there is difficulty

in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If unconscious place in the recovery position. OBTAIN MEDICAL

ATTENTION URGENTLY.

5. Fire Fighting Measures

Hazards Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-

fighters should wear protective clothing and breathing apparatus. Vapour-air mixtures are

explosive.

Extinguishing Water spray, alcohol resistant foam, dry powder or carbon dioxide. Use water spray to keep Media

fire exposed containers cool.

Unsuitable

Media

Do not use water jet.

6. Accidental Release Measures

Personal Ensure no sources of ignition. Avoid breathing vapour. Use approved personal protective Protection equipment. Evacuate area immediately. Do not allow general use of area until it is safe to

do so. Beware : vapour is heavier than air and will tend to accumulate at low spots.

Environmental Keep material out of sewers, storm drains, surface waters and soil. Notify the

Environmental Agency and local Environmental Health Officer if major spillage occurs.

Major Spillage Contain and absorb on inert material. Transfer absorbent to salvage container for removal.

Wash area down with copious amounts of water.

Minor Spillage Contain and absorb on inert material. Transfer absorbent to container for removal. Allow

solvent to evaporate in remote area, then dispose of absorbent as solid chemical waste.

Wash area down with copious amounts of water.

7. Storage & Handling

Handling Precautions All transfer systems should be earthed to prevent accumulation of static electricity. Avoid

contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended

limits.

Storage Conditions Well ventilated, cool, dry storage . Protect from direct sun and store away from sources of

ignition. Keep containers closed when not in use. Keep well separated from oxidising

agents.

8.1 Workplace Exposure Limits

Workplace Exposure Limits Long Term (8hr TWA): 10.00 ppm 37.00 mg m-3
Short Term (15min Period): - ppm - mg m-3

Maximum Exposure Limits Long Term (8hr TWA): 10.00 ppm 37.00 mg m-3 Short Term (15min Period): - ppm - mg m-3

Special Hazards Can be absorbed through skin.

8.2 Personal Protection

Respiratory Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits.

If not, use a well maintained chemical cartridge organic vapour respirator, or use self

contained breathing apparatus.

Hands Use solvent resistant gloves.

Eyes Use chemical splash proof glasses or goggles.

Skin Avoid contact with skin. If skin contact or contamination of clothing is likely, protective

clothing must be worn.

9. Physical & Chemical Properties

Appearance Clear colourless liquid.

Odour Odourless.
pH Not available
Boiling point 135.1 °C
Melting point 70.0- °C

Flash point 40.0 °C(DIN 51755)

Upper Flammable Limit $$15.7\ \%$$ Lower Flammable Limit $$2.6\ \%$$ Auto Ignition $$238.0\ ^{\circ}C$$

Explosive properties Moderate/severe in confined spaces.

Oxidising Properties No.

Vapour Presure 3.8 mm Hg @ 20 C

Relative Density 0.9320

Water Solubility Completely miscible in water.

10. Stability & Reactivity

Chemical Stability Stable under normal conditions

Conditions to Avoid Hot surfaces, naked flames or other sources of ignition.

Materials to Avoid Strong oxidising agents. Hydrogen peroxide, chromium trioxide and potassium permanganate.

Hazardous None unusual. Burning will produce smoke, carbon monoxide and/or carbon dioxide.

Decomposition Products

11. Toxicological Information

Eyes The liquid or concentrated vapour will be irritating to the eyes.

Skin The liquid may be absorbed across the skin in harmful amounts. Many of the effects typical

of the vapour can result from absorbtion through the skin.

LD50 Skin Rabbit 3.5g/Kg

Ingest Ingestion will cause gastrointestinal irritation. Ingestion of large amounts may cause

liver and kidney damage.

LD50 Ingest Oral Rat 3g/kg

Inhalation The vapour may produce irritation of the eyes, nose, throat and respiratory tract. Toxic

effects to the blood, liver, kidneys, central nervous system and reproductive system have observed at levels above 300ppm, with adverse effects noted at levels as low as 10ppm.

Carcinogenicity No information is available.

Mutagenicity Not considered to be a mutagen.

Reproductive Effects Teratogen category 2. In laboratory animals and human exposures, a decrease in sperm count,

sperm abnormalities, and a degeneration of the testes have been observed. Significant

maternal toxicity, embryotoxic effects and teratogenic effects occur.

been set.

12. Ecological

Low toxicity to fish ;LC50 24 Hr (goldfish) >5000mg/l. Theoretical Oxygen demand (ThOD)= 1.96 g/g : BOD =1.27 g/g : COD =1.92 g/g.

13. Disposal Considerations

Disposal Methods Dispose of in a licensed incinerator for organic solvents. Do not dispose of as domestic waste. Never dispose of into water courses or sewerage systems due to high risk of

explosion.

Contaminated Packaging Use a licensed waste disposer. Do not attempt to burn any residual liquids due to risk of

 ${\tt explosion.}$

14. Transport Information

Proper Shipping Name Ethylene glycol monomethylether

UN Number 1171

UN Classification 3 Flammable liquid

Subsidiary Risk None

Flash Point 40.0 °C(DIN 51755)

Packing Group III
Transport Category 3
Marine pollutant No
ADR Hazard ID 30



15. Regulatory Information

Labelling Classification Toxic, Flammable.

Label Symbols

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Risk & safety Phrases

May impair fertility. May cause harm to the unborn child. Flammable. Harmful by inhalation, in contact with skin and if swallowed. Avoid exposure - obtain special instruction before use. In case of accident or if you feel unwell, seek medical advice immediately (show the label).

EEC Number 203-804-1

16. Other Information

Document Information

This document has been prepared in accordance with directive 88/379/EEC.

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment.

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