

Camlab Limited – Material Safety Data Sheet

1. Identification


Product Code CC/1094-CO

Product Name **2-ETHOXYETHANOL pure**

Molecular Formula **C₂H₅OCH₂CH₂OH =90.12**

CAS Number 110-80-5

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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

Eyes Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. If discomfort persists OBTAIN MEDICAL ATTENTION.

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

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 Media Water spray, alcohol resistant foam, dry powder or carbon dioxide. Use water spray to keep fire exposed containers cool.

Unsuitable Media Do not use water jet.

6. Accidental Release Measures

Personal Protection	Ensure no sources of ignition. Avoid breathing vapour. Use approved personal protective 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 °C
Explosive properties	Moderate/severe in confined spaces.
Oxidising Properties	No.
Vapour Pressure	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 Decomposition Products	None unusual. Burning will produce smoke, carbon monoxide and/or carbon dioxide.

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 absorption 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 been 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.
Other Information	It is regarded as posing a significant risk to exposed workers and hence low MEL's have 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 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 Toxic, Flammable.
Classification

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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