

Camlab Limited – Material Safety Data Sheet


1. Identification

Product Code CC/1493-CO

Product Name **TRIETHANOLAMINE pure**

Molecular Formula **$N(CH_2CH_2OH)_3 = 149.19$**

CAS Number 102-71-6

Supplier: **CAMLAB LIMITED**

**Norman Way Industrial Estate
Over
Cambridge
England
CB4 5WE**

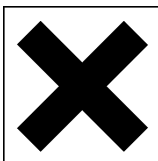
Phone 01954 233110
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24hr 112
(Have this document to hand)

2. Composition

Component	CAS No	EEC No	Conc w/w	Classification & Risk Phrases	Exp (See 8.1)
Triethanolamine	102-71-6	203-049-8	> 97.0%	Xi : R36/38	N/A

3. Hazards Identification



Irritating to eyes and skin.

4. First Aid Measures

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

Skin Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. In severe cases or if exposure has been great, OBTAIN MEDICAL ATTENTION.

Inhalation Remove from exposure. Keep warm and at rest. OBTAIN MEDICAL ATTENTION.

Ingestion If conscious give plenty of water to drink. OBTAIN MEDICAL ATTENTION.

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. May evolve toxic fumes if involved in a fire.

Extinguishing Media Alcohol resistant foam, dry powder, carbon dioxide or vaporising liquid. Use water spray to keep fire exposed containers cool.

Unsuitable Media Nothing specified.

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.

6. Accidental Release Measures (continued)

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	Wash area down with copious amounts of water.

7. Storage & Handling

Handling Precautions	Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing. Ensure Local Exhaust Ventilation maintains vapour concentrations to a minimum.
Storage Conditions	Well ventilated, cool, dry storage . Protect from direct sun and store away from sources of ignition.

8.1 Workplace Exposure Limits

No prescribed exposure limits available

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	Colourless liquid or frozen mass.
Odour	Pungent fishy odour. Strong ammoniacal odour at higher concentrations.
pH	10 (0.1M solution)
Boiling point	335.0 °C
Melting point	21.0- °C
Flash point	210.0 °C(Closed cup)
Upper Flammable Limit	Not available
Lower Flammable Limit	Not available
Auto Ignition	385.0 °C
Explosive properties	Slight.
Oxidising Properties	No.
Vapour Pressure	0.02 hPa @20
Relative Density	1.1250
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	Acids. Strong oxidising agents.
Hazardous Decomposition Products	Burning will produce toxic fumes of NO _x , carbon monoxide and/or carbon dioxide.

11. Toxicological Information

Eyes	Both the vapour and liquid will, be irritating to the eyes but unlikely to cause serious injury.
Skin	Both the vapour and liquid will, be irritating to the skin.
LD50 Skin	Not available
Ingest	Ingestion of large amounts will cause damage to the central nervous system, heart, liver and kidneys.
LD50 Ingest	Oral Rat 400 mg/Kg
Inhalation	Exposure to vapour concentrations above the occupational exposure limits will produce irritation of the eyes and respiratory tract. Symptoms include drowsiness, mental confusion and unconsciousness. effects the central nervous system resulting in gastrointestinal tract causing, headache, nausea, giddiness, vomiting, insomnia and anorexia.
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.
Other Information	Air odour threshold is 0.3 ppm.

12. Ecological

Small amounts present no specific environmental hazard.

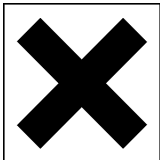
13. Disposal Considerations

Disposal Methods	Dispose of in a licensed incinerator for organic solvents.
Contaminated Packaging	Wash out containers with water. Use a licensed waste disposer.

14. Transport Information

Proper Shipping Name	Non-restricted
UN Number	Non-restricted
UN Classification	None
Subsidiary Risk	None
Flash Point	210.0 °C(Closed cup)
Packing Group	None
Transport Category	None
Marine pollutant	No
ADR Hazard ID	Non-restricted

15. Regulatory Information

Labelling	Irritant.
Classification	
Label Symbols	Xi 
Risk & safety Phrases	Irritating to eyes and skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
EEC Number	203-049-8

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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