


1. Identification

Product Code 1111087

Product Name **DIETHANOLAMINE pure**

Molecular Formula **[CH₂(OH)CH₂]₂NH =105.14**

CAS Number 111-42-2

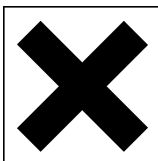
Supplier: **CAMLAB LIMITED**

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

Phone 01954 233110
 Fax 01954 233101

Emergency Telephone 08:00–17:00 01954 233110
 24hr 112
 (Have this document to hand)

2. Composition

Component	CAS No	EEC No	Conc w/w	Classification & Risk Phrases	Exp (See 8.1)
Diethanolamine	111-42-2		> 98.0%	Xn : R22,R38,R41,R48/22	WEL

3. Hazards Identification

Harmful if swallowed. Irritating to skin. Risk of serious damage to eyes. Harmful: danger of serious damage to health by prolonged exposure 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. In severe cases or if exposure has been great, 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.
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	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):	3.000 ppm	15.00 mg m-3
	Short Term (15min Period):	- ppm	- mg m-3

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 to pale yellow liquid.
Odour	Slight ammoniacal odour.
pH	11 @ 20 °C
Boiling point	269.0 °C
Melting point	28.0 °C
Flash point	154.4 °C(Closed cup)
Upper Flammable Limit	10.0 %
Lower Flammable Limit	1.0 %
Auto Ignition	Not available
Explosive properties	Slight.
Oxidising Properties	No.
Vapour Pressure	< 0.01 mmHg
Relative Density	1.0900 °C
Water Solubility	Moderately soluble 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	Mineral acids. Strong oxidising agents.
Hazardous Decomposition Products	Burning will produce toxic fumes of NOx, carbon monoxide and/or carbon dioxide.

11. Toxicological Information

Eyes	The liquid or concentrated vapour will cause severe irritation and corneal damage.
Skin	The liquid will be irritating to the skin. May be absorbed through the skin. May cause skin sensitisation.
LD50 Skin	Rabbit 3g/kg
Ingest	Moderately toxic by ingestion. Ingestion of large amounts may cause severe internal irritation and damage, nausea, vomiting, abdominal pains and diarrhoea.
LD50 Ingest	Rat 1.41 g/kg
Inhalation	Exposure to vapour concentrations above the occupational exposure limits may produce irritation of the eyes and respiratory tract. High concentrations of vapour may cause loss of appetite, dizziness, fatigue and nausea. Liver and kidney damage may also occur.
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	Not teratogenic but high doses have caused maternal and foetal toxicity.

12. Ecological

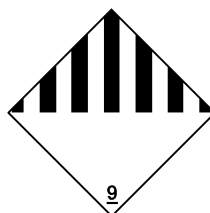
Readily bio-degraded in the environment.

13. Disposal Considerations

Disposal Methods	Dispose of in a licensed incinerator for organic solvents. Do not dispose of as domestic waste.
Contaminated Packaging	Use a licensed waste disposer. Do not attempt to burn any residual liquids due to risk of explosion.

14. Transport Information

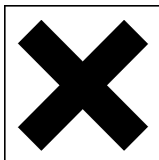
Proper Shipping Name	Environmentally Hazardous Substance, Liquid, N.O.S.
UN Number	3082
UN Classification	9 Miscellaneous
Subsidiary Risk	None
Flash Point	154.4 °C(Closed cup)
Packing Group	III
Transport Category	3
Marine pollutant	Yes
ADR Hazard ID	90



15. Regulatory Information

Labelling	Harmful.
Classification	

Label Symbols	Xn
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Risk & safety Phrases	Harmful if swallowed. Irritating to skin. Risk of serious damage to eyes. Harmful: danger of serious damage to health by prolonged exposure if swallowed. Keep out of reach of children. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. If swallowed, seek medical advice immediately and show this container or label.
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EEC Number	Not available
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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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