Camlab Limited – Material Safety Data Sheet

1. Identification	
Product Code	1110991
Product Name	PROPAN-1-OL pure
Molecular Formula	СН ₃ СН ₂ СН ₂ ОН =60.10
CAS Number	71–23–8
supplier: camlab	CAMLAB LIMITED Norman Way Industrial Estate Over Cambridge England CB4 5WE
Phone Fax	01954 233110 01954 233101
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2. Composition

Component	CAS No	EEC No	Conc w/w	Classification & Risk Phrases	Exp (See 8.1)
Propan-1-ol	71-23-8	200-746-9	> 99.7%	F Xi : R11,R41,R67	WEL

3. Hazards Identification



Highly flammable. Risk of serious damage to eyes. Vapours may cause drowsiness and dizziness.

4. First Aid Me	easures
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.
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.
Enviromental	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): Short Term (15min Period):	200.0 250.0	1 1	500.0 mg m-3 625.0 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	Fresh and characteristic.
рH	Not available
Boiling point	97.1 °C
Melting point	127.0- °C
Flash point	15.0 °C(DIN 51755)
Upper Flammable Limit	13.5 %
Lower Flammable Limit	2.1 %
Auto Ignition	370.0 °C
Explosive properties	Moderate/severe in confined spaces.
Oxidising Properties	No.
Vapour Presure	10.0 mmHg @ 20,C
Relative Density	0.8044
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. Potassium t-butoxide.
Hazardous Decomposition Products	None unusual. Burning will produce smoke, carbon monoxide and/or carbon dioxide.

11. Toxicological	Information
Eyes	Both the vapour and liquid may, be irritating to the eyes. High concentrations of vapour may produce conjunctival irritation and corneal damage.
Skin	Repeated or prolonged contact may defat the skin producing irritation and dermatitis. Many of the effects typical of the vapour can result from absorbtion through the skin.
LD50 Skin	Not available
Ingest	Ingestion will cause central nervous system depression, leading to unconsciousness. Symptoms are the same as for vapour inhalation.
LD50 Ingest	Not available
Inhalation	Exposure to vapour concentrations above the occupational exposure limits will produce irritation of the eyes and respiratory tract. High concentrations of vapour may effect the central nervous system acting as a narcotic. Symptoms include drowsiness, mental confusion and unconsciousness.
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.

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. 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	n-Propanol
UN Number	1274
UN Classification	3 Flammable liquid
Subsidiary Risk	None
Flash Point	15.0 °C(DIN 51755)
Packing Group	II
Transport Category	2
Marine pollutant	No
ADR Hazard ID	33



15. Regulatory Information

Labelling Classification

Label Symbols

Highly Flammable, Irritant.





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Ref: 1110991 –13/01/06

15. Regulatory Information (continued)

Risk & safety Phrases	Highly flammable. Risk of serious damage to eyes. Vapours may cause drowsiness and
	dizziness. Keep out of reach of children. Keep container tightly closed. Keep away from
	sources of ignition - No Smoking. Avoid contact with skin. In case of contact with eyes,
	rinse immediately with plenty of water and seek medical advice. Wear eye/face protection.

EEC Number 200-746-9

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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