

SAFETY DATA SHEET

PRODUCT: ISOPROPANOL



1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

PRODUCT: ISOPROPANOL (ISOPROPYL ALCOHOL)
PRODUCT SUPPLIER:: VET WAY LIMITED
1 HARRIER COURT
AIRFIELD BUSINESS PARK
ELVINGTON YORK
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2. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS NO.	CONTENTS	HEALTH	RISK
PROPAN-2-OL	67-63-0	100%	Xi	R-36,67

3. HAZARDS IDENTIFICATION

Highly Flammable
Irritating to eyes.
Vapours may cause drowsiness or dizziness.

4. FIRST AID MEASURES

INHALATION	Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. Keep the affected person warm and at rest. Get prompt medical attention.
INGESTION	NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Get prompt medical attention.
SKIN	Remove affected person from source of contamination. Promptly wash contaminated skin with mild soap or detergent and water. Promptly remove clothing if soaked through and wash as above. Get medical attention if symptoms occur after washing.
EYES	Promptly wash eyes for at least with plenty of water while lifting eyelids open. Get medical attention if any discomfort continues.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA	Use extinguishing media appropriate for surrounding fire. Dry chemicals, sands dolomite etc. Foam. DO NOT extinguish fire unless flow can be stopped first.
SPECIAL FIRE FIGHTING PROCEDURES	Water may be ineffective but use to keep fire exposed containers cool. Keep run off water out of sewers and water sources. Dike for water control. Avoid water in straight hose stream; will scatter and spread fire. Cool containers exposed to

flames with water until well after the fire is out. Move container from fire area if it can be done without risk. If risk of water pollution occurs, notify appropriate authorities. . Personnel should wear SCBA.

UNUSUAL FIRE & EXPLOSION HAZARDS

Extremely flammable. May explode in a fire. May travel considerable distance to source of ignition and flash back.

6. ACCIDENTAL RELEASE MEASURES

SPILL CLEANUP METHODS

Shut off all sources of ignition. Advise emergency services of spillage and evacuate the area. Prevent product from entering drains, sewers and watercourses. Where this has already happened, restrict the spread as far as possible. In the case of a small spillage, absorb with suitable absorbent material and dispose of in a small container. In the case of a large spillage, inform the Fire Brigade and the Rivers Authority if necessary. Clean up personnel should wear suitable protective equipment. Signs indicating the primary hazard must be erected in all areas where the spillage has penetrated.

7. HANDLING AND STORAGE

USAGE PRECAUTIONS Keep away from sources of ignition. Keep containers closed when . not in use. Handle in accordance with good industrial hygiene and safety practice.

STORAGE PRECAUTIONS Flammable/Combustible-Keep away from oxidisers, heat and flames. May attack some plastics, rubber and coatings. Keep in cool dry ventilated storage and closed containers. Ground container and transfer equipment to eliminate static electric sparks. Store in accordance with Health & Safety Executive recommendations. (HSG 50-52)

STORAGE CRITERIA Flammable liquid storage.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

INGREDIENT NAME	CAS NO	STD	LT EXP (8 HRS)	ST EXP (15MIN)
PROPAN-2-OL	67-63-0	OES.	400ppm	500ppm
PROTECTIVE EQUIPMENT	FACE SHIELD AND GLOVES			
VENTILATION	Provide adequate general and local exhaust ventilation.			
RESPIRATORS	No specific recommendation made, but respiratory protection must be used if the general level exceeds the OEL.			
PROTECTIVE GLOVES	Protective gloves should be used if there is a risk of direct contact.			
EYE PROTECTION	Wear safety goggles where eye exposure is possible.			
OTHER PROTECTION	Use engineering controls to reduce air contamination to permissible exposure level. Wear appropriate clothing to prevent repeated or prolonged skin contact. Provide eyewash station and safety shower.			

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid
COLOUR	Colourless
ODOUR/TASTE	Rubbing alcohol
SOLUBILITY DESCRIPTION	Miscible with water, alcohol, ether
BOILING POINT	~82 degrees C
MELTING POINT	~ -88 degrees C
FLASH POINT	~11 degrees C

AUTO IGNITION TEMPERATURE	398 degrees C		
SPECIFIC GRAVITY(Water = 1)	0.79		
FLAMMABILITY LIMIT (Lower%)	2.5		
FLAMMABILITY LIMIT (Upper%)	12.7		
MOL WEIGHT (AT WT)	60.11		
VAPOUR DENSITY (air=1)	2.7		
EVAPORATION RATE	2.83		
VAPOUR PRESSURE	33.00		
10. STABILITY AND REACTIVITY			
CONDITIONS TO AVOID Heat Sparks and Flame HAZARDOUS POLYMERISATION Will not polymerise MATERIALS TO AVOID Aluminium, Crotonaldehyde, Oleum, Carbonyl Chloride, Potassium-tert-Butoxide- Strong Oxidising Agents HAZARDOUS DECOMPOSITION PRODUCTS Vapours/gases/fumes of: Carbon Monoxide(CO), Carbon Dioxide(CO2)			
11. TOXICOLOGICAL INFORMATION			
TOXIC DOSE1-LD50	5840mg/kg (oral rat)		
HEALTH WARNINGS Exposure: This chemical has good warning properties. Gas or vapour is harmful on prolonged exposure or in high concentration. Irritant of eyes and mucous membranes. Toxic through skin absorption (percutaneous) Narcotic effect. CNS depressant. May cause chemical eye burns. Swallowing concentrated chemical may cause severe internal injury, unconsciousness, death. OTHER HEALTH EFFECTS IARC Int. Agency for Cancer Research. CONSOLIDATED CARCINOGEN LIST MEDICAL SYMPTOMS Irritation of eyes and mucous membranes. Dilated pupils. Rhinitis (inflammation of the nasal mucous membranes) Upper respiratory irritation. General respiratory distress, unproductive cough. May cause suffocation. Skin irritation. Nausea, vomiting. Unconsciousness, possibly death. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo. Behavioural changes. Hypotension (low blood pressure) Dizziness.			
12. ECOLOGICAL INFORMATION			
GENERAL NOTES			
13. DISPOSAL CONSIDERATIONS			
DISPOSAL METHODS Dispose of in accordance with Local Authority requirements.			
14. TRANSPORT INFORMATION			
ROAD			
UN No	1219	ADR CLASS No	3
ADR ITEM No	3(b)	ADR LABEL No	3
HAZCHEM CODE	2sE	CEFIC TEC(R) No	544
SEA			
TRANSPORT CLASS NO	3.2		
SEA PACK GP	II		
IMDG Page NO	3100		

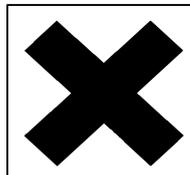
AIR	
TRANSPORT CLASS NO	3
AIR PACK GP	II

15. REGULATORY INFORMATION

LABELS FOR SUPPLY:



HIGHLY FLAMMABLE



HARMFUL

RISK PHASES	R-11	Highly Flammable
	R-36	Irritating to eyes.
	R-67	Vapours may cause drowsiness or dizziness.
SAFETY PHASES	S-2	Keep out of reach of children.
	S-7	Keep container tightly closed.
	S-16	Keep away from sources of ignition-No smoking.
	S-26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S-24/25	Avoid contact with skin & eyes.

UK REGULATORY REFERENCES
Classification, Packing and Labelling Regulations 1984
Highly Flammable Liquid Regulations 1972
Health & Safety at Work 1974
The Control of Substances Hazardous to Health Regulations 1988

16. OTHER INFORMATION

The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these. Refer to all applicable national, international and local regulations or provisions.

The above information is believed to be correct but does not purport to be all inclusive and shall only be used as a guide. The suitability of this product for any particular use is not suggested or implied. The company shall not be held liable for any damage resulting from handling or from contact with the above product.