ISOPROPYL ALCOHOL



SAFETY DATA SHEET



1 - IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the substance or preparation:

Name: ISOPROPYL ALCOHOL.

Company/undertaking identification:

Registered company name: VISHAY MEASUREMENTS GROUP UK LTD Address: Stroudly Road Basingstoke Hampshire RG24 8FW ENGLAND Telephone: +44 (0) 1256 462131 Fax: +44 (0) 1256 471441 Email : vmm.us@vishaymg.com

Emergency telephone: (00-1) 703-527-3887.

Association/Organisation: CHEMTREC.

2 - HAZARDS IDENTIFICATION

This product is classed: Highly flammable liquid. Possibility of irritation to the eyes. Vapors may cause drowsiness and dizziness.

Preparation classification:





R 11	Highly flammable.
R 36	Irritating to eyes.
R 67	Vapours may cause drowsiness and dizziness.

3 - COMPOSITION/INFORMATION ON INGREDIENTS

Full text of risk phrases appearing in section 3: see section 16.

Hazardous substances present on their own:

INDEX	CAS	EC	Name	Symb.	к:	%	
	0 • 0	50	N 1	0 1	D	0/	
(present in th	(present in the preparation at a sufficient concentration to give it the toxicological characteristics it would have in a 100% pure state)						

Other substar	nces representing					
603-117-00-0	67-63-0	200-661-7	PROPAN-2-OL	Xi F	11 36 67	100 %

No known substance in this category present.

Substances present at a concentration below the minimum danger threshold:

No known substance in this category present.

Other substances with occupational exposure limits:

No known substance in this category present.

4 - FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing in an unconscious person.

In the event of exposure by inhalation:

If a large quantity is inhaled, move the patient into the fresh air and keep him/her warm and still.

In the event of splashes or contact with eyes:

Wash thoroughly with soft, clean water for 15 minutes holding the eyelids open.

Refer the patient to an ophthalmologist, in particular if there is any redness, pain or visual impairment.

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Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.

In the event of splashes or contact with skin:

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

DO NOT use solvents or thinners.

In the event of swallowing:

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Keep still. DO NOT induce vomiting.

Call a doctor immediately and show him the label.

5 - FIRE-FIGHTING MEASURES

Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

Suitable extinguishing media:

Special foams for polar liquids (known as alcohol resistant), powders, carbon dioxide.

Extinguishing media which must not be used for safety reasons:

Sometimes, and due to the presence of organic material, a fire may produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

Prevent the effluent of fire-fighting measures from entering drains or waterways.

Special protective equipment for fire-fighters:

Fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

6 - ACCIDENTAL RELEASE MEASURES

Personal precautions:

Eliminate any possible source of ignition and ventilate the premises.

On account of the organic solvents contained in the preparation, eliminate sources of ignition and ventilate the premises.

Avoid inhaling the vapors.

Avoid any contact with the skin and eyes.

Consult the safety measures listed under headings 7 and 8.

Environmental precautions:

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

Use drums to dispose of waste recovered in accordance with applicable regulations (see heading 13).

If the product contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures

Methods for cleaning up:

Clean preferably with a detergent, do not use solvents.

7 - HANDLING AND STORAGE

The regulations relating to storage premises apply to workshops where the product is handled.

Handling:

Handle in well-ventilated areas.

The vapors are denser than air. They can spread along the ground and form explosive mixtures with air

Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits.

Fire prevention:

Use the product in premises where there are no naked flames or other sources of ignition and have protected electrical equipment Keep packages tightly closed and away from sources of heat, sparks and naked flames.

Do not use tools which may produce sparks. Do not smoke.

Prevent access by unauthorised personnel.

Recommended equipment and procedures:

For personal safety, see §8.

Observe precautions stated on label and also industrial safety regulations

Packages which have been opened must be reclosed carefully and stored in an upright position

Avoid inhaling vapors.

Avoid contact of product with the eyes

Prohibited equipment and procedures:

Smoking, eating and drinking are prohibited in premises where the preparation is used

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Never open the packages under pressure

Storage:

Keep the container tightly closed in a dry, well-ventilated place

Keep away from all sources of ignition - do not smoke.

Keep well away from all sources of ignition, heat and direct sunlight

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Technical measures:

Ensure adequate ventilation, if possible with extractor fans at work posts and appropriate general extraction.

If this ventilation is insufficient to maintain the concentration of solvent vapors below the exposure limits, wear breathing apparatus

Exposure limit values per INRS ED 984:

France	VME-ppm:	VME-mg/m3:	VLE-ppm:	VLE-mg/m3:	Notes:	TMP N°:		
67-63-0	-	-	400	980	-	84		
Exposure limit values per 2006/15/CE, 2000/39/EC and 98/24/EC:								
EC	VME-mg/m3:	VME-ppm:	VLE-mg/m3:	VLE-ppm:	Notes:			

Respiratory protection:

Where workers encounter concentrations higher than the exposure limits, they must wear suitable, approved masks.

Hand protection:

Protective creams may be used for exposed skin, but they should not be applied after contact with the product.

Due to the solvents present, it is recommended that neoprene rubber or nitrile rubber gloves be worn

Eye and face protection:

Avoid contact with eyes.

Wear safety goggles.

Provide eye washes in workshops where the product is constantly handled

Skin protection:

For further information, see § 11 of S.D.S. - Toxicological information.

9 - PHYSICAL AND CHEMICAL PROPERTIES

General information:

Physical state:	fluid liquid				
Important health, safety and environmental information:					
pH of the substance or preparation:	not relevant.				
The pH is impossible to measure or its value is not relevant.					
Boiling point/boiling range:	not specified.				
Flash point interval:	Flash point <= 21°C				
Vapour pressure:	Below 110 kPa (1.10 bar).				
Density:	<1				
Water solubility:	Soluble.				
Other information:					
melting point/melting range:	-89 °C.				
Self-ignition temperature:	not specified.				
Decomposition point/decomposition range : not specified.					

10 - STABILITY AND REACTIVITY

When exposed to high temperatures, the preparation may release dangerous decomposition products such as carbon monoxide and dioxide, smoke and nitrogen oxide

Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.

11 - TOXICOLOGICAL INFORMATION

No data is available regarding the preparation itself.

Splashes in the eyes may cause irritation and reversible damage

It is generally agreed that substances contained are likely to cause, when applied to the eye of an animal, the appearance of major lesions which persist for at least twenty-four hours

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12 - ECOLOGICAL INFORMATION

No ecological data on the product itself is available.

The product must not be allowed to run into drains or waterways.

13 - DISPOSAL CONSIDERATIONS

Do not pour into drains or waterways.

Waste:

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company. Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging:

Empty container completely. Keep label(s) on container. Give to a certified disposal contractor.

14 - TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2009 - IMDG 2008 - ICAO/IATA 2009).

Classification:



UN1219=ISOPROPANOL (ISOPROPYL ALCOHOL)

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	3	F1	II	3	33	LQ4	601	E2	2	D/E
IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ			
	3	-	II	1 L	F-E,S-D	-	E2			
IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ	
	3	-	II	305	5 L	307	60 L	-	-	-
	3	-	11	Y305	1 L	-	-	-	-	-

15 - REGULATORY INFORMATION

This preparation was classified in compliance with the directive known as <All preparations> 1999/45/EC and its adaptations In addition directive 2001/59/EC with the 28° adaptation of directive 67/548/EEC (Hazardous substances) have been taken into account. **Preparation classification:**





Highly flammable

Particular hazards associated with the preparation and safety recommendations:

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

16 - OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The product must not be used for any purposes other than those specified under heading 1 without first obtaining written handling instructions.

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It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations. The information given on this safety data sheet must be regarded as a description of the safety requirements relating to our product and not a guarantee of its properties

Full text of risk phrases appearing in section 3:

R 11	Highly flammable.
R 36	Irritating to eyes.
R 67	Vapours may cause drowsiness and dizziness.