

Barrettine

SAFETY DATA SHEET

Isopropanol

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name	Isopropanol
Chemical name	Propan-2-ol
Product No.	ISOPBUL
Internal Id	0717
REACH Registration number	01-2119457558-25-XXXX

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Industrial solvent.
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1.3. Details of the supplier of the safety data sheet

Supplier	Barrettine Barrettine Works St Ivel Way Warmley Bristol BS30 8TY Tel: 0117 960 0060 Fax: 0117 935 2437 sales@barrettine.co.uk
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1.4. Emergency telephone number

0870 190 6777

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Flam. Liq. 2 - H225
Human health	Eye Irrit. 2 - H319; STOT SE 3 - H336
Environment	Not classified.

Classification (67/548/EEC)

Xi; R36. F; R11. R67.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements

Label In Accordance With (EC) No. 1272/2008



Signal Word

Danger

Hazard Statements

H225
H319Highly flammable liquid and vapour.
Causes serious eye irritation.

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Precautionary Statements	H336	May cause drowsiness or dizziness.
	P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
	P260	Do not breathe vapours.
	P280	Wear protective gloves.
	P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P370	In case of fire: Use alcohol resistant foam or dry powder for extinction.
Supplementary Precautionary Statements	P501D	Empty containers may contain residual product and vapours. Do not cut or weld on or near empty containers. Disposal should only be by means of a licensed waste disposal contractor.
	P264	Wash skin thoroughly after handling.
	P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P403+233+235	Store in a well-ventilated place, in original container. Keep container tightly closed, Keep cool.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

2-PROPANOL	>98%	
CAS-No.: 67-63-0	EC No.: 200-661-7	Registration Number: 01-2119457558-25-XXXX
Classification (EC 1272/2008)	Classification (67/548/EEC)	
Flam. Liq. 2 - H225	F;R11	
Eye Irrit. 2 - H319	Xi;R36	
STOT SE 3 - H336	R67	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

REACH Registration number 01-2119457558-25-XXXX

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

Remove affected person from source of exposure. Provide fresh air, first-aid, warmth and rest.

Never give victim anything to drink if they are unconscious. Get medical attention if any discomfort continues.

Inhalation

If unconscious place patient on their side in the recovery position and ensure they are breathing. Clean nose and mouth with water.

Artificial respiration may be administered by suitably qualified first-aiders.

Get medical attention if symptoms persist.

Ingestion

If swallowed do NOT induce vomiting.

Never give anything by mouth to an unconscious person. Rinse mouth thoroughly and seek medical attention if discomfort persists. Keep patient under observation.

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Skin contact

Remove contaminated clothing and shoes. Wash skin thoroughly with soap and running water. Take especial care to clean folds, crevices, creases and groin.

Get medical attention if irritation persists or develops.

Launder clothing and clean shoes thoroughly before reuse.

Eye contact

Check for contact lenses which must be removed from the eyes before rinsing.

Promptly rinse eyes with plenty of clean water while lifting the eyelids.

Continue to rinse for at least 15 minutes. Continue until the eyes are free of all traces of contamination.

Get medical attention if any discomfort or irritation persists.

4.2. Most important symptoms and effects, both acute and delayed

4.3. Indication of any immediate medical attention and special treatment needed

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Use carbon dioxide, dry powder, foam or water fog, mist or spray. Do not use high pressure water jet as this may spread burning material.

5.2. Special hazards arising from the substance or mixture

Unusual Fire & Explosion Hazards

Fire causes formation of toxic gases.

Specific hazards

The product is flammable, and heating may generate vapours which may form explosive vapour/air mixtures.

5.3. Advice for firefighters

Protective equipment for fire-fighters

Wear self-contained breathing apparatus and full protective clothing. Keep all unnecessary people away. Fire water run-off must not be allowed to contaminate ground or enter drains, sewers or water courses. Provide bunding against fire water run-off.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Ventilate to dispel any residual vapour. Clean-up personnel should use respiratory protection, gloves, goggles and protective clothing and footwear (see section 8).

6.2. Environmental precautions

Do not allow spilt material to enter drains or water courses. Cover all drains and sewers. Avoid spreading spilled material. Contain spillages with sand, earth or suitable inert absorbent material. Prevent further spillage if safe to do so. In the event of contamination of watercourses or sewers advise the Environment Agency, fire brigade and police.

6.3. Methods and material for containment and cleaning up

Absorb in vermiculite, sand, diatomaceous earth or other inert absorbent material. Place into clearly labelled container for recovery or disposal (see section 13). Rinse site with copious amounts of water, which should not be allowed into drains, sewers or water courses.

6.4. Reference to other sections

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Eye wash facilities and emergency shower must be available when handling this product. Use only in well ventilated areas.

Avoid spilling, skin and eye contact. Do not breathe vapour or fumes.

Use suitable protective clothing (see section 8). Wash thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

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Keep away from all possible sources of ignition.

Store in tightly closed containers in segregated, cool, dry, ventilated storage.

7.3. Specific end use(s)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
2-PROPANOL	WEL	400 ppm	999 mg/m ³	500 ppm	1250 mg/m ³	

WEL = Workplace Exposure Limit.

2-PROPANOL (CAS: 67-63-0)

DNEL					
Industry	Inhalation.	Long Term	Systemic Effects	500 mg/m ³	
Industry	Dermal	Long Term	Systemic Effects	888 mg/kg/day	
Consumer	Inhalation.	Long Term	Systemic Effects	89 mg/m ³	
Consumer	Dermal	Long Term	Systemic Effects	319 mg/kg/day	
Consumer	Oral	Long Term	Systemic Effects	26 mg/kg/day	
PNEC					
Freshwater	140.9	mg/l			
Sediment (Freshwater)	552	mg/kg			
Marinewater	140.9	mg/l			
Sediment (Marinewater)	552	mg/kg			
Soil	28	mg/kg			
STP	2251	mg/l			

8.2. Exposure controls

Process conditions

Provide eyewash station.

Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Respiratory equipment

If ventilation is insufficient suitable respiratory protection must be provided.

Seek advice and recommendations of the manufacturer or supplier of equipment

Hand protection

Wear suitable protective gloves conforming to EN 374. Seek recommendations from manufacturer or supplier. After using gloves the hands should be washed and dried thoroughly and a suitable moisturiser applied.

Eye protection

Contact lenses should not be worn when working with this chemical! Wear approved safety goggles.

Other Protection

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station and safety shower. Minimise all forms of skin contact. Overalls and footwear with oil and chemical resistant soles should be worn.

Launder overalls and undergarments regularly.

Hygiene measures

Wash promptly if skin becomes contaminated. Promptly remove non-impervious clothing that becomes contaminated.

When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Colourless.
Odour	Alcoholic
Solubility	Completely miscible with water.
Initial boiling point and boiling range (°C)	82-83°C
Melting point (°C)	-90°C

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Relative density	0.785 @ 20°C
Vapour density (air=1)	2.1
Vapour pressure	43.3 hPa 20°C
Viscosity	3 mPas 20°C
Flash point (°C)	12°C CC (Closed cup).
Auto Ignition Temperature (°C)	399°C
Flammability Limit - Lower(%)	2
Flammability Limit - Upper(%)	12
Partition Coefficient (N-Octanol/Water)	+0.05

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

10.2. Chemical stability

Stable under normal conditions of storage and use. See section 7.

10.3. Possibility of hazardous reactions

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials To Avoid

Strong oxidising substances. Strong acids.

10.6. Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxic Dose 1 - LD 50

4700-5800 mg/kg (oral rat)

Toxic Dose 2 - LD 50

13000 mg/kg (dermal-rabbit)

Toxic Conc. - LC 50

19000 ppm/8hr (inh-rat)

Inhalation

In high concentrations, vapours are narcotic and may cause headache, fatigue, dizziness and nausea.

Ingestion

Gastrointestinal symptoms, including upset stomach.

Skin contact

Repeated exposure may cause skin dryness or cracking. Absorption of organic solvents through the skin can cause the same effects as inhalation.

Eye contact

Irritating to eyes.

SECTION 12: ECOLOGICAL INFORMATION

Isopropanol

Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.1. Toxicity

LC 50, 96 Hrs, Fish mg/l	9640-10400
EC 50, 48 Hrs, Daphnia, mg/l	7550-13299
IC 50, 72 Hrs, Algae, mg/l	>1000

12.2. Persistence and degradability

12.3. Bioaccumulative potential

Bioaccumulative potential

Will not bio-accumulate.

Partition coefficient +0.05

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Empty containers may contain residual product and flammable vapours. Keep away from sparks, heat and sources of ignition. Labels should not be removed. Product is hazardous waste. Do not allow into drains, sewers or water courses. Disposal must be by means of a licensed waste contractor.

13.1. Waste treatment methods

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN)	1219
UN No. (IMDG)	1219
UN No. (ICAO)	1219

14.2. UN proper shipping name

Proper Shipping Name ISOPROPANOL (ISOPROPYL ALCOHOL)

14.3. Transport hazard class(es)

ADR/RID/ADN Class	3
ADR/RID/ADN Class	Class 3: Flammable liquids.
ADR Label No.	3
IMDG Class	3
ICAO Class/Division	3

Transport Labels



14.4. Packing group

Isopropanol

ADR/RID/ADN Packing group	II
IMDG Packing group	II
ICAO Packing group	II

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant
No.

14.6. Special precautions for user

EMS	F-E, S-D
Emergency Action Code	•2YE
Hazard No. (ADR)	33
Tunnel Restriction Code	(D/E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Statutory Instruments

Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 SI No 716. (CHIP4).

Control of Substances Hazardous to Health Regulations (as amended). (COSHH)

Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2007. (CDG 2009)

Environmental Protection (Duty of Care) Regulations.

Guidance Notes

Workplace Exposure Limits EH40.

Introduction to Local Exhaust Ventilation HS(G)37.

CHIP for everyone HSG(108).

EU Legislation

EC Regulation 1272/2008 (as amended): CLP (Classification, labelling and packaging of substances and mixtures).

15.2. Chemical Safety Assessment

SECTION 16: OTHER INFORMATION

Revision Comments

REACH registration number(s) added.

Revision Date 13-MAR-2013

Revision Rev 02: 0717

SDS No. 10790

Risk Phrases In Full

R11 Highly flammable

R36 Irritating to eyes.

R67 Vapours may cause drowsiness and dizziness.

Hazard Statements In Full

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.