

Product Isopropanol USP Grade
 Revision date 29 June 2018
 Revision 3



Safety Data Sheet (SDS)

Section 1: Identification of the substance/preparation and of the company/undertaking

1.1 Product identifier

Product name Isopropanol USP Grade
Synonyms, Trade names No information available.

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

Identified uses Manufacture of substances, Distribution and storage, Formulations.
Uses advised against No uses advised against are identified.

1.3 Details of the supplier of the safety data sheet

Supplier Solv-Echem Ireland Ltd
 Great Island Industrial Park
 Ballincollig
 Cork
 Ireland
 Tel: 00 353 (0)21 487 7066
 tony@solvechem.com

Contact person

1.4 Emergency telephone number

Emergency telephone 00 353 (0)21 487 7066

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.2A - H319, STOT SE 3 - H336
 Environment Not classified

2.2 Label elements

Label in accordance with (EC) no. 1272/2008



Signal word Danger

Hazard statements H225 Highly flammable liquid and vapour.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.

Precautionary statements

Prevention

P280 Wear protective gloves/ protective clothing/eye protection/face protection.
 P261 Avoid breathing dust/fume/ gas/mist/vapours/spray.
 P210 Keep away from heat/ sparks/open flames/hot surfaces. — No smoking.

Response

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated

clothing. Rinse skin with water/ shower.

Storage

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

2.3 Other hazards

None known.

Section 3: Composition/identification of ingredients**3.1 Substance**

Not applicable.

3.2 Mixtures

Name	Product identifier	Reg. EU 1272/2008	%
propan-2-ol	CAS-No.: 67-63-0 EC No.: 200-661-7	Eye Irrit.2A - H319, Flam. Liq 2- H225, STOT SE 3 - H336	60-100%

The full text for all hazard statements are displayed in section 16.

Composition comments

The data shown are in accordance with the latest EC Directives.

Section 4: First aid measures**4.1 Description of first aid measures**

General information	General first aid, rest, warmth and fresh air.
Inhalation	Move injured person into fresh air and keep person calm under observation. If necessary, seek hospital and bring these instructions.
Ingestion	Rinse mouth with water. Consult a doctor/medical service if you feel unwell.
Skin contact	Wash the skin immediately with soap and water. Immediately remove contaminated clothing. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.
Eye contact	Do not rub eye. Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Continue flushing during transport to hospital. Bring these instructions.

4.2 Most important symptoms and effects, both acute and delayed

General information	Central nervous system depression, prolonged or repeated exposure can cause: Nausea, Headache, Vomiting, Narcosis, Drowsiness, Overexposure may cause mild, reversible liver effects.
Inhalation	Vapours may cause headache, fatigue, dizziness and nausea.
Ingestion	May cause discomfort if swallowed.
Skin contact	Prolonged contact may cause redness, irritation and dry skin.
Eye contact	May cause severe irritation to eyes.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to the physician	Treat Symptomatically.
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Section 5: Fire-fighting measures**5.1 Extinguishing media**

Extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	No unsuitable extinguishing media identified.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products	Carbon Oxides.
Unusual fire & explosion hazards	Highly Flammable!
Specific hazards	Vapours may be ignited by a spark, a hot surface or an ember.

5.3 Advice for firefighters

- Special fire fighting procedures** If possible, fight fire from protected position. Ventilate closed spaces before entering them. Keep up-wind to avoid fumes. Containers close to fire should be removed immediately or cooled with water.
- Protective equipment for firefighters** Self contained breathing apparatus and full protective clothing must be worn in case of fire.

Section 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

- Personal precautions** Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
- For emergency responders** No information available.

6.2 Environmental precautions

- Environmental precautions** Do not discharge into drains, water courses or onto the ground.

6.3 Methods and material for containment and cleaning up

- Spill clean up methods** Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations.

6.4 Reference to other sections

- Reference to other sections** For waste disposal, see section 13.

Section 7: Handling and storage**7.1 Precautions for safe handling**

- Handling** Keep away from heat, sparks and open flame. Eliminate all sources of ignition. Use explosion proof electric equipment. Provide good ventilation. Container must be kept tightly closed.

7.2 Conditions for safe storage, including any incompatibilities

- Storage precautions** Flammable/combustible - Keep away from oxidisers, heat and flames. Take precautionary measures against static discharges. Store in tightly closed original container in a well-ventilated place. Store in an area secured under lock and key.
- Storage class** Flammable liquid storage.

7.3 Specific end use(s)

- Specific end use(s)** The identified uses for this product are detailed in Section 1.2.
- Usage description** Use only according to directions.

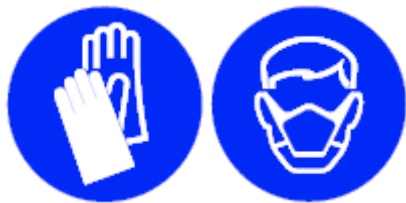
Section 8: Exposure controls/Personal protection**8.1 Control parameters**

Component	STD	TWA (8 Hrs)		STEL (15mins)		Notes
propan-2-ol	OEL	200.000 ppm	0.000 mg/m ³	400.000 ppm	0.000 mg/m ³	
propan-2-ol	OEL	200 ppm		400 ppm		

- Ingredient comments** Ireland, Occupational Exposure Limits 2016.

8.2 Exposure Controls

- Protective equipment**

**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.

Hand protection

Wear chemical protective gloves that are in accordance with EN 374. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Eye protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Other protection

Provide eyewash station.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

Process conditions

Keep container tightly sealed when not in use.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Colourless.
Odour	Odour of alcohol.
Odour threshold - lower	No information available.
Odour threshold - upper	No information available.
pH-Value, Conc. Solution	No information available.
pH-Value, Diluted solution	No information available.
Melting point	No information available.
Initial boiling point and boiling range	9999.90
Flash point	No information available.
Evaporation rate	No information available.
Flammability state	No information available.
Flammability limit - lower(%)	No information available.
Flammability limit - upper(%)	No information available.
Vapour pressure	No information available.
Vapour density (air=1)	No information available.
Relative density	No information available.
Bulk density	No information available.
Solubility	Miscible in water.
Decomposition temperature	No information available.
Partition coefficient; n-Octanol/Water	No information available.
Auto ignition temperature (°C)	No information available.

Viscosity	No information available.
Explosive properties	No information available.
Oxidising properties	No information available.

9.2 Other information

Molecular weight	No information available.
Volatile organic compound	No information available.
Other information	None.

Section 10: Stability and reactivity**10.1 Reactivity**

Reactivity	No specific reactivity hazards associated with this product.
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10.2 Chemical stability

Stability	Stable under normal temperature conditions and recommended use.
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10.3 Possibility of hazardous reactions

Hazardous reactions	None known.
Hazardous polymerisation	Will not polymerise.
Polymerisation description	No information available.

10.4 Conditions to Avoid

Conditions to avoid	Avoid contact with strong oxidisers. Avoid heat, flames and other sources of ignition.
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10.5 Incompatible materials

Materials to avoid	Strong oxidising substances.
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10.6 Hazardous decomposition products

Hazardous decomposition products	During fire, toxic gases (Carbon Oxides, Carbon Dioxide) are formed.
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Section 11: Toxicological information**11.1 Information on toxicological effects**

Toxicological information	The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC.
Acute toxicity (Oral LD50)	=4570.00mg/kg Rat
Acute toxicity (Dermal LD50)	=13400.00mg/kg Rat
Acute toxicity (Inhalation LD50)	No information available.
Serious eye damage/irritation	Moderately irritating. May cause burns.
Skin corrosion/irritation	No information available.
Respiratory sensitisation	No information available.
Skin sensitisation	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Specific target organ toxicity - Single exposure:	
STOT - Single exposure	No information available.

Specific target organ toxicity - Repeated exposure:

STOT - Repeated exposure	No information available.
Inhalation	Vapours may cause headache, fatigue, dizziness and nausea.
Ingestion	May cause discomfort if swallowed.
Skin contact	Prolonged contact may cause redness, irritation and dry skin.
Eye contact	May cause severe irritation to eyes.
Waste management	When handling waste, consideration should be made to the safety precautions applying to handling of the product.
Routes of entry	Skin and/or Eye Contact
Target organs	Eyes, Skin, Inhalation and Ingestion.
Aspiration hazards:	No information available.
Reproductive toxicity:	No information available.

Section 12: Ecological information

12.1 Toxicity

Acute toxicity - Fish	No information available.
Acute toxicity - Aquatic invertebrates	No information available.
Acute toxicity - Aquatic plants	No information available.
Acute toxicity - Microorganisms	No information available.
Chronic toxicity - Fish	No information available.
Chronic toxicity - Aquatic invertebrates	No information available.
Chronic toxicity - Aquatic plants	No information available.
Chronic toxicity - Microorganisms	No information available.
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.
Eco toxicological information	Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008.

12.2 Persistence and degradability

Degradability	There are no data on the degradability of this product.
Biological oxygen demand	No information available.
Chemical oxygen demand	No information available.

12.3 Bioaccumulative potential

Bioaccumulative potential	No data available on bioaccumulation.
Bioaccumulation factor	No information available.
Partition coefficient; n-Octanol/Water	No information available.

12.4 Mobility in soil

Mobility	No information available.
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12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment The product does not contain any PBT or vPvB Substances.

12.6 Other adverse effects

Other adverse effects	None known.
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Section 13: Disposal considerations

Waste management	When handling waste, consideration should be made to the safety precautions applying to handling of the product.
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13.1 Waste treatment methods

Disposal methods	Small amounts may be flushed with water to sewer. Larger volumes must be sent to approved plant for destruction.
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Section 14: Transport information**14.1 UN number**

UN no. (ADR)	UN1219
UN no. (IMDG)	UN1219
UN no. (IATA)	UN1219

14.2 UN proper shipping name

ADR proper shipping name	ISOPROPANOL (ISOPROPYL ALCOHOL)
IMDG proper shipping name	ISOPROPANOL (ISOPROPYL ALCOHOL)
IATA proper shipping name	ISOPROPYL ALCOHOL

14.3 Transport hazard class(es)

ADR class	3
IMDG class	3
IATA class	3

Transport labels**14.4 Packing group**

ADR/RID/ADN packing group	II
IMDG packing group	II
IATA packing group	II

14.5 Environmental hazards

ADR	No
IMDG	No
IATA	No

14.6 Special precautions for user

EMS	F-E, S-D
Emergency action code	A180
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**

EU legislation	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. The UN Globally Harmonized System (GHS) Safety Data Sheet format (Annex IV) is implemented as Annex II of REACH EU No 453/2010 of 20th May 2010 amending regulation (EC) No 1907/2006.
Approved code of practice	2016 Code of Practice for the Chemical Agents Regulations in accordance with section 60 of the Safety, Health and Welfare at Work Act 2005 (No. 10 of 2005).
Chemical safety assessment	No chemical safety assessment has been carried out.

Section 16: Other information

General information	This Safety Data Sheet is in accordance with Reach Regulation (EC) No 453/2010
Revision comments	This is a third issue.
Revision date	29 June 2018
Supersedes date	26 June 2018
Revision	3
Safety data sheet status	Approved.

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.