

## SAFETY DATA SHEET

### PROPAN-2-OL

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

##### 1.1. Product identifier

<b>Product name</b>	PROPAN-2-OL
<b>Product number</b>	461
<b>Synonyms; trade names</b>	IPA,IPS,SEC PROPYL ALCOHOL,ISOPROPYL ALCOHOL,CAFSOL 2,EVERBLEND 15,AL11,IPA LOW ODOUR,ISOPROPANOL,ISOPROPANOL PC SSL,ISOPROPANOL PC SHL,ISOPROPANOL SSL,MX-THINNER HTS 83698,ISOPROPANOL SHELL,ISOPROPANOL EP,ISOPROPANOL (PHARMA),ISOPROPANOL MIN 99.5%,ISOPROPANOL MIN. 99.8%,ISOPROPANOL (IPA),ISOPROPANOL C+,ISOPROPYL ALCOHOL TT-I-735A
<b>REACH registration number</b>	01-2119457558-25
<b>CAS number</b>	67-63-0
<b>EU index number</b>	603-117-00-0
<b>EC number</b>	200-661-7

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

<b>Identified uses</b>	Industrial Solvent In household and cosmetic chemical industry. Pharmaceuticals Chemicals used in the synthesis and / or formulation of industrial products
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##### 1.3. Details of the supplier of the safety data sheet

<b>Supplier</b>	Express Chems Unit 27, 3 Campsie Rd, Kirkintilloch, Glasgow G66 1SL info@expresschems.co.uk +44 141 776 5666
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##### 1.4. Emergency telephone number

<b>Emergency Contact Number (Office Hours)</b>	+44 1274 267346
<b>Emergency Contact Number (Outside Office Hours)</b>	+441865 407333
<b>Sds No.</b>	461

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Classification

<b>Physical hazards</b>	Flam. Liq. 2 - H225
<b>Health hazards</b>	Eye Irrit. 2 - H319 STOT SE 3 - H336

## PROPAN-2-OL

**Environmental hazards** Not Classified

**Classification (67/548/EEC or 1999/45/EC)** F; R11. Xi; R36. R67

### 2.2. Label elements

**EC number** 200-661-7

**Pictogram**



**Signal word** Danger

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

**Precautionary statements**  
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P240 Ground/bond container and receiving equipment.  
 P241 Use explosion-proof electrical equipment.  
 P242 Use only non-sparking tools.  
 P243 Take precautionary measures against static discharge.  
 P261 Avoid breathing vapour/spray.  
 P264 Wash contaminated skin thoroughly after handling.  
 P271 Use only outdoors or in a well-ventilated area.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P312 Call a POISON CENTER/doctor if you feel unwell.  
 P337+P313 If eye irritation persists: Get medical advice/attention.  
 P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.  
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
 P403+P235 Store in a well-ventilated place. Keep cool.  
 P405 Store locked up.  
 P501 Dispose of contents/container in accordance with national regulations.

### 2.3. Other hazards

None.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

**Product name** PROPAN-2-OL  
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**EU index number** 603-117-00-0  
**CAS number** 67-63-0  
**EC number** 200-661-7

## PROPAN-2-OL

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<b>Inhalation</b>	Move affected person to fresh air at once. Get medical attention.
<b>Ingestion</b>	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Give plenty of water to drink. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention.
<b>Skin contact</b>	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.
<b>Eye contact</b>	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

<b>Inhalation</b>	Vapours may irritate throat/respiratory system. Symptoms following overexposure may include the following: Coughing. May cause drowsiness or dizziness.
<b>Ingestion</b>	Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.
<b>Skin contact</b>	Product has a defatting effect on skin. Dryness and/or cracking.
<b>Eye contact</b>	Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain.

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

<b>Notes for the doctor</b>	No specific recommendations. If in doubt, get medical attention promptly.
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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.

#### 5.2. Special hazards arising from the substance or mixture

<b>Specific hazards</b>	Oxides of the following substances: Carbon. The product is highly flammable. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.
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#### 5.3. Advice for firefighters

<b>Special protective equipment for firefighters</b>	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
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### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Follow precautions for safe handling described in this safety data sheet Take precautionary measures against static discharges. Provide adequate ventilation.
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#### 6.2. Environmental precautions

<b>Environmental precautions</b>	Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.
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## PROPAN-2-OL

### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Absorb spillage with inert, damp, non-combustible material. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

### 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8. For waste disposal, see section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Avoid spilling. Keep away from heat, sparks and open flame. Storage tanks and other containers must be earthed. Avoid contact with skin and eyes. Use mechanical ventilation in case of handling which causes formation of vapours.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage precautions** Keep away from heat, sparks and open flame. Store in tightly-closed, original container in a well-ventilated place.

**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.

## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m<sup>3</sup>

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit

**DNEL**

- Industry - Dermal; Long term systemic effects: 888 mg/kg/day
- Industry - Inhalation; Long term systemic effects: 500 mg/m<sup>3</sup>
- Consumer - Dermal; Long term systemic effects: 319 mg/kg/day
- Consumer - Inhalation; Long term systemic effects: 89 mg/m<sup>3</sup>
- Consumer - Oral; Long term systemic effects: 26 mg/kg/day

**PNEC**

- Fresh water; 140.9 mg/l
- Marine water; 140.9 mg/l
- Intermittent release; 140.9 mg/l
- STP; 2251 mg/l
- Sediment (Freshwater); 552 mg/kg
- Sediment (Marinewater); 552 mg/kg
- Soil; 28 mg/kg

### 8.2. Exposure controls

#### Protective equipment



#### Eye/face protection

The following protection should be worn: Chemical splash goggles. EN 166

## PROPAN-2-OL

<b>Hand protection</b>	Use protective gloves. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. EN 374
<b>Respiratory protection</b>	If ventilation is inadequate, suitable respiratory protection must be worn. EN 136/140/145/143/149

### SECTION 9: Physical and Chemical Properties

#### 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Liquid.
<b>Colour</b>	Colourless.
<b>Odour</b>	Alcoholic.
<b>pH</b>	Data lacking.
<b>Melting point</b>	-88°C
<b>Initial boiling point and range</b>	82 - 83°C @
<b>Flash point</b>	12°C
<b>Evaporation rate</b>	1.5
<b>Upper/lower flammability or explosive limits</b>	Upper flammable/explosive limit: 12 Lower flammable/explosive limit: 2.0
<b>Vapour pressure</b>	6020 Pa @ °C
<b>Vapour density</b>	2
<b>Relative density</b>	0.78-0.79 @ @ 20°C
<b>Bulk density</b>	Data lacking. «59» «184» «109012»
<b>Solubility(ies)</b>	Soluble in water.
<b>Partition coefficient</b>	log Pow: 0.05
<b>Auto-ignition temperature</b>	425°C
<b>Decomposition Temperature</b>	Data lacking.
<b>Viscosity</b>	2.43 mPa s @ 20°C
<b>Explosive properties</b>	Data lacking.
<b>Oxidising properties</b>	Not available.

#### 9.2. Other information

<b>Refractive index</b>	1.377 at 20C
<b>Molecular weight</b>	60.1

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

**Reactivity** The following materials may react with the product: Strong oxidising agents. Strong acids.

#### 10.2. Chemical stability

**Stability** Stable at normal ambient temperatures and when used as recommended.

#### 10.3. Possibility of hazardous reactions

## PROPAN-2-OL

**Possibility of hazardous reactions** Solvent vapours may form explosive mixtures with air.

### 10.4. Conditions to avoid

**Conditions to avoid** Avoid heat, flames and other sources of ignition. Avoid excessive heat for prolonged periods of time.

### 10.5. Incompatible materials

**Materials to avoid** Strong oxidising agents. Strong acids. Alkali metals. Amines. Aluminium. Iron.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Oxides of the following substances: Carbon.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity - oral

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 5,000.0

**Species** Rat

**Notes (oral LD<sub>50</sub>)** LD<sub>50</sub> >5000 mg/kg, Oral, Rat

#### Acute toxicity - dermal

**Acute toxicity dermal (LD<sub>50</sub> mg/kg)** 5,000.0

**Species** Rabbit

**Notes (dermal LD<sub>50</sub>)** LD<sub>50</sub> >5000 mg/kg, Dermal, Rabbit

#### Skin corrosion/irritation

**Animal data** Not irritating.

#### Respiratory sensitisation

**Respiratory sensitisation** Not sensitising.

#### Skin sensitisation

**Skin sensitisation** Not sensitising.

#### Germ cell mutagenicity

**Genotoxicity - in vivo** Data lacking.

#### Carcinogenicity

**Carcinogenicity** There is no evidence that the product can cause cancer.

#### IARC carcinogenicity

**IARC carcinogenicity** IARC Group 3 Not classifiable as to its carcinogenicity to humans.

#### Reproductive toxicity

**Reproductive toxicity - fertility** Data lacking.

#### Specific target organ toxicity - single exposure

**STOT - single exposure** Data lacking.

#### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Data lacking.

## PROPAN-2-OL

<b>Inhalation</b>	May cause respiratory system irritation. Vapours may cause drowsiness and dizziness.
<b>Ingestion</b>	Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.
<b>Skin contact</b>	Prolonged contact may cause dryness of the skin.
<b>Eye contact</b>	Irritating to eyes.

### SECTION 12: Ecological Information

**Ecotoxicity** The product is not expected to be toxic to aquatic organisms.

#### 12.1. Toxicity

**Toxicity** Not considered toxic to fish.

**Acute toxicity - fish** LC<sub>50</sub>, 48 hours: >100 mg/l, *Leuciscus idus* (Golden orfe)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: >100 mg/l, *Daphnia magna*

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 72 hours: >100 mg/l, *Scenedesmus subspicatus*

#### 12.2. Persistence and degradability

**Persistence and degradability** The substance is readily biodegradable.

#### 12.3. Bioaccumulative potential

**Bioaccumulative potential** The product is not bioaccumulating.

**Partition coefficient** log Pow: 0.05

#### 12.4. Mobility in soil

**Mobility** The product is soluble in water.

#### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This substance is not classified as PBT or vPvB according to current EU criteria.

#### 12.6. Other adverse effects

**Other adverse effects** No data available.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

**General information** Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Do not puncture or incinerate, even when empty. Materials such as cleaning rags and paper wipes that are contaminated with flammable liquids may self-ignite after use and should be stored in designated fireproof containers with tight-fitting, self-closing lids.

**Disposal methods** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

### SECTION 14: Transport information

#### 14.1. UN number

**UN No. (ADR/RID)** 1219

**UN No. (IMDG)** 1219

**PROPAN-2-OL**

UN No. (ICAO) 1219

**14.2. UN proper shipping name**

Proper shipping name (ADR/RID) ISOPROPANOL (ISOPROPYL ALCOHOL)

Proper shipping name (IMDG) ISOPROPANOL (ISOPROPYL ALCOHOL)

Proper shipping name (ICAO) ISOPROPANOL (ISOPROPYL ALCOHOL)

Proper shipping name (ADN) ISOPROPANOL (ISOPROPYL ALCOHOL)

**14.3. Transport hazard class(es)**

ADR/RID class 3

ADR/RID subsidiary risk

ADR/RID label 3

IMDG class 3

IMDG subsidiary risk

ICAO class/division 3

ICAO subsidiary risk

Transport labels

**14.4. Packing group**

ADR/RID 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 Identification Number (ADR/RID) 33

Tunnel restriction code (D/E)

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Cat Z

**SECTION 15: Regulatory information**



## PROPAN-2-OL

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

<b>National regulations</b>	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
<b>EU legislation</b>	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 (as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). This product may impact SEVESO storage regulations.
<b>Guidance</b>	CHIP for everyone HSG228. Workplace Exposure Limits EH40. Safety Data Sheets for Substances and Preparations. Approved Classification and Labelling Guide (Sixth edition) L131.
<b>Water hazard classification</b>	WGK 1
<b>Inventory Information</b>	TSCA AICS DSL ENCS EINECS PICCS ISHL

### 15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

<b>SECTION 16: Other information</b>
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<b>Revision comments</b>	NOTE: Lines within the margin indicate significant changes from the previous revision.
<b>Revision date</b>	13/05/2015
<b>Revision</b>	03
<b>SDS number</b>	461
<b>SDS status</b>	Approved.
<b>Signature</b>	Jitendra Panchal
<b>Risk phrases in full</b>	R11 Highly flammable. R36 Irritating to eyes. R67 Vapours may cause drowsiness and dizziness.
<b>Hazard statements in full</b>	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.