

# SAFETY DATA SHEET

According to Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
Revision Date Jun 01, 2022

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

#### 1.1 Product identifier

Product name PROPAN-1-OL

CAS-No. 71-23-8

Product code AR1161, GP1161, LC1161, RP1161

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

Identified uses Chemical for analysis and production.

#### 1.3 Details of the supplier of the safety data sheet

Company ChemSupply Australia Pty Ltd

38 - 50 Bedford Street, Gillman SA 5013 Australia

Telephone number (08) 8440 2000 Fax number (08) 8440 2001

#### 1.4 Emergency Telephone Number

Emergency phone

Monday - Friday 8:30am - 5:00pm ACST (08) 8440 2000

After hours: CHEMCALL 1800127406 / +6449179888

#### 1.5 Manufacturer

Company RCI LABSCAN LIMITED.

24 Rama 1 Road, Pathumwan, Bangkok 10330 Thailand

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

# Classification according to WHS Regulations (Australia)

Flammable liquids (Category 2), H225

Serious eye damage (Category 1), H318

Specific target organ toxicity - single exposure (Category 3), H336

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 2.2 Label elements





Signal word Danger

Hazard statement(s)

H225 Highly flammable liquid and vapour.
 H318 Causes serious eye damage.
 H336 May cause drowsiness or dizziness.

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.

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P242 Use non-sparking tools. P243 Take action to prevent static discharges. P261 Avoid breathing dust/fume/gas/mist/vapours/spray. 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 [or shower]. P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305 + P354 + P338 IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P317 Get medical help. P370 + P378 In case of fire: Use carbon dioxide, dry chemical or foam to extinguish. P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

2.3 Other hazards None

#### **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Synonyms 1-Propanol, n-Propyl alcohol, 1-Hydroxy propane, Ethyl carbinol, n-Propanol.

CAS-No EC-No EC-Index-No Formula Molecular Weight Weight % 71-23-8 200-746-9 603-003-00-0  $CH_3CH_2CH_2OH$  60.10 g/mol <=100

#### Hazardous ingredients according to WHS Regulations (Australia)

Component	Concentration	Classification
Propan-1-ol		
CAS-No 71-23-8 EC-No 200-746-9 EC-Index-No 603-003-00-0	<=100%	Flammable liquids (Category 2), H225 Serious eye damage (Category 1), H318 Specific target organ toxicity - single exposure (Category 3), H336

For the full text of the H-Statements mentioned in this Section, see Section 16

#### **SECTION 4: First aid measures**

# 4.1 Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. Inhalation Move to fresh air in case of accidental inhalation of vapors. Keep patient warm. In case of shortness of breath, give oxygen. Apply artificial respiration only if patient is not breathing or under medical supervision. No artificial aspiration mouth to mouth or mouth to nose. Use suitable instruments/apparatus. Skin contact Remove contaminated clothing and wash affected skin with soap and water. If signs of poisoning appear, treat as for inhalation. Obtain medical attention. Wash contaminated clothing before reuse. Contaminated combustible material, e.g. clothing ignites more readily and burns fiercely. Eve contact If the substance has got into the eyes, immediately wash out with plenty of water at least 15 minutes. Obtain medical attention. Ingestion Rinse mouth. Immediately make victim drink water (two glasses at the most). Do not induce vomiting. Keep patient warm. In case of shortness of breath, give oxygen. Apply

Rinse mouth. Immediately make victim drink water (two glasses at the most). Do not induce vomiting. Keep patient warm. In case of shortness of breath, give oxygen. Apply artificial respiration only if patient is not breathing or under medical supervision. No artificial aspiration mouth to mouth or mouth to nose. Use suitable instruments/apparatus. Obtain medical attention. Never give anything by mouth to an unconscious person.

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

The most important known symptoms and effects are described in section 2.2 and section 11.

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

After swallowing, avoid vomiting. Risk of aspiration. Keep airways free. Subsequently administer; Activate charcoal 20-40 g in 10% slurry. Summon doctor. Laxative: Sodium Sulfate 1 tablespoon/250 ml of water.

# **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

## Suitable extinguishing media

Extinguish with carbon dioxide, dry chemical or foam. In the event of fire, cool tanks with water spray.

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

Vapors may form explosive mixture with air at ambient temperature. Flash back possible over considerable distance.

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus and protective suit.

#### 5.4 Hazchem Code

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#### 5.5 Further information

Standard procedure for chemical fires. Take measures to prevent electrostatic charging. Prevent firefighting water from entering surface water or groundwater.

#### **SECTION 6: Accidental release measures**

## 6.1 Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Do not breathe vapors or spray mist. Wear a positive-pressure supplied-air respirator, flame retardant antistatic protective clothing. Shut off leaks if without risk. Keep people away from and upwind of spill/leak.

#### 6.2 Environmental precautions

Contain or absorb leaking liquid with sand or earth, consults an expert. Prevent liquid entering sewers, basements and workpits. If substance has entered a water course or sewer or contaminated soil, advise police.

## 6.3 Methods and materials for containment and cleaning up

Spillage: May react with combustible substances creating fire or explosion hazard and formation of toxic fumes. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Soak up with inert absorbent material (e.g. sand, silica gel or chemical absorbent pads). Prevent liquid entering sewers, basements and workpits; vapor may create explosive atmosphere. Transfer to covered steel drums. Dispose of promptly.

#### 6.4 Reference to other sections

For disposal see Section 13.

# **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Keep container tightly closed. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only in area provided with appropriate exhaust ventilation. Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing. Do not empty into drains.

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## 7.2 Conditions for safe storage, including any incompatibilities

Keep tightly closed in a dry, cool and well ventilated place. Keep away from heat and sources of ignition. Keep out of direct sunlight and away from incompatible materials. Store in original container. Electrical equipment should be protected to the appropriate standard.

#### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

# **SECTION 8: Exposure controls/personal protection**

## 8.1 Control parameters

# **Exposure limit (Safe Work Australia)**

TWA: 200 ppm (492 mg/m³) STEL: 250 ppm (614 mg/m³)

#### 8.2 Exposure controls

#### Appropriate engineering controls

The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Ventilation hoods and fans required when working with organic solvents or in hot melt applications.

# Individual protection measures (Personal protective equipment, PPE) Eye/face protection

Goggles giving complete protection to eyes.

#### Skin protection

Chemical resistant apron / flame retardant antistatic protective clothing, heavy duty work shoes.

Handle with gloves

- Full contact wears gloves from nitrile rubber material.
- Splash contact wears gloves from polychloroprene material.

The select protective gloves have to satisfy the specifications of EU Directive 89/686 EEC and standard EN 374 derived from it.

## Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Required when vapor/aerosols are generated filter A (EN 141 or EN 14387).

#### **Environmental exposure controls**

Prevent liquid entering sewers, basements and workpits.

# **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

Appearance: From Liquid Colorless

Odour Alcohol like
Odour Threshold Not Available

pH 7 at 200 g/l,  $H_2O$  at 20°C

Melting point/range -127 °C

Boiling point/range 97 °C at 1013 hPa
Flash point 15 °C (closed cup)
Evaporation rate Not Available
Flammability (solid, gas) Not Available
Explosion limits: lower 2.1 % (V)
upper 19.2 % (V)

upper 19.2 % (V) 19 hPa at 20°C

Vapor Pressure 19 hPa at 20°C

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Relative Vapor Density 2.1

Density 0.800 g/ml at 20°C Water solubility Miscible in all proportions

Partition coefficient (n-octanol/water) log Pow: 0.25
Auto-Ignition temperature 360 °C
Decomposition Temperature Not Available
Viscosity 2.3 mPa.s at 20°C
Explosive properties Not Explosive

Oxidizing properties The substance or mixture is not classified as oxidizing.

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Highly flammable.

#### 10.2 Chemical stability

Stable under recommended storage conditions.

## 10.3 Possibility of hazardous reactions

The substance can react dangerously with alkali metals, strong oxidizing agents, potassium-tert-butoxide, alkaline-earth metals/heat.

#### 10.4 Conditions to avoid

Heat, flames and sparks.

#### 10.5 Incompatible materials

Alkali metals, alkali earth metals, alcoholates, strong oxidizing agents.

#### 10.6 Hazardous decomposition products

Carbon monoxides, Carbon dioxides (Hazardous decomposition products from under fire condition).

# **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

### **Acute toxicity**

LC<sub>50</sub> (inhalation, rat): >34 mg/l /4h. LD<sub>50</sub> (dermal, rabbit): 5040 mg/kg. LD<sub>Lo</sub> (oral, human): 5700 mg/kg.

#### **Acute oral toxicity**

Rapid absorbtion

Symptoms: headache, dizziness, inebriation, unconsciousness, narcosis. Risk of aspiration upon vomiting.

#### Acute inhalation toxicity

Irritations of mucous membreanes, coughing and dyspnoea, drowziness.

## Skin corrosion/irritation

Skin irritation test (rabbit): No irritation.

Slight irritations.

# Serious eye damage/eye irritation

Slight irritations. Risk of serious damage to eyes.

## Respiratory or skin sensitization

Patch test (humans): No sensitizing effect.

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#### Germ cell mutagenicity

Bacterial mutagenicity: Ames test is negative.

## Carcinogenicity

Not Available

#### Reproductive toxicity

Not Available

#### **Teratogenicity**

Not Available

## Specific target organ toxicity (STOT) - single exposure

May cause drowsiness or dizziness.

## Specific target organ toxicity (STOT) - repeated exposure

Not Available

#### **Aspiration hazard**

Not Available

#### **Further information**

After uptake of large quantities: Respiratory paralysis, coma.

The product should be handled with the care usual when dealing with chemicals.

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

Toxicity to fish  $LC_{50}$  P.promelas : 4630 mg/l/96 h. Toxicity to daphnia  $EC_{50}$  Daphnia magna: 3644 mg/l /48 h.

and other aquatic invertebrates

Toxicity to algae IC<sub>50</sub> Pseudokirchneriella subcapitata (green algae) : 1150 mg/l /48h.

Toxicity to bacteria EC<sub>50</sub> activated sludge : >1000 mg/l /3h.

EC<sub>50</sub> Photobacterium phosphoreum: 17700 mg/l /5 min microtox test.

## 12.2 Persistence and degradability

Biodegradability 75% /20 d. Readily biodegradable

## 12.3 Bioaccumulative potential

Partition coefficient (n-octanol/water) log Pow: 0.25 (experimental).

No Bioaccumulation (log P o/w <1).

# 12.4 Mobility in soil

Not Available

#### 12.5 Other adverse effects

Do not allow to enter waters, waste water or soil.

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

## Product

There are no uniform EC Regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding law and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste or burn in a chemical

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incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations.

#### Contaminated packaging

Disposal in compliance with official regulations. Handle contaminated packaging as hazardous waste in the same way of the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

## **SECTION 14: Transport information**

#### Land Transport (ADR/RID)

UN Number 1274

UN proper shipping name n-PROPANOL

Transport hazard class(es)

Hazchem Code

Packing group

Environmental hazards

No

Special precautions for user

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No

Yes

#### Sea transport (IMDG)

UN Number 1274

UN proper shipping name n-PROPANOL

Transport hazard class(es)

Packing group

Marine pollutant

Special precautions for user

EmS

Second Seco

## Air transport (IATA)

UN Number 1274

UN proper shipping name n-PROPANOL

Transport hazard class(es) 3
Packing group II
Environmental hazards No
Special precautions for user No

# River transport (AND/ADNR)

(Not examined)

## **SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Not Available

## 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

## **SECTION 16: Other information**

# Full text of H-Statements referred to under sections 2 and 3

H225 Highly flammable liquid and vapour.H318 Causes serious eye damage.

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H336

May cause drowsiness or dizziness.

#### Recommended restrictions

Take notice of labels and safety data sheets for the working. Chemicals Take necessary action to avoid static electricity discharge.

#### Reference

Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

Labelling according to EC Directives 67/548 EEC and Regulation (EC) No 1272/2008.

Transportation information according to Recommendations on the Transport of Dangerous Goods, Model Regulations. Twelfth revised edition. United Nations.

Institute for Occupational Safety and Health of the German Social Accident Insurance in Sankt Augustin/Germany, Source: IFA for Databases on hazardous substances (GESTIS).

## **Further information**

ChemSupply Australia Pty Ltd Ph. (08) 8440 2000.

#### **Revision Date**

01/06/2022

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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 unless specified in the text.

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