

# SAFETY DATA SHEET: ISOPROPANOL

MSDS No: TMC-AL-1219

## 1. IDENTIFICATION OF CHEMICAL PRODUCT

**Name of substance:** Isopropyl Alcohol **Chemical Family:** Alcohol

**Product Description:** Clear colourless liquid

**Supplier:** Transmare-Chemie (Singapore) Pte Ltd  
No. 12 Soon Lee Road, Singapore 628076  
Telephone: (65) 6262 0122  
Facsimile: (65) 6262 0112  
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Website: [www.transmare-chemie.com](http://www.transmare-chemie.com)

## 2. HAZARDS IDENTIFICATION

### GHS CLASSIFICATION:

Flammable Liquid	Category 2
Acute Toxicity – Oral	Category 5
Acute Toxicity – Dermal	Category 5
Serious Eye Damage / Irritation	Category 2
Reproductive Toxicity	Category 2
Specific Target Organ Toxicity (Single Exposure)	Category 3 (Respiratory Tract Irritation)
Specific Target Organ Toxicity (Single Exposure)	Category 1 (Central Nervous System, Kidney, Systemic Toxicity)
Specific Target Organ Toxicity (Repeated Exposure)	Category 2 (Blood vessel, Liver, Spleen)
Aspiration Hazard	Category 2

### GHS Label Elements

#### Symbols:



**Signal Word(s):** Danger

### GHS Hazards Statement

#### Physical Hazards:

H225: Highly Flammable Liquid and Vapor.

#### Health Hazards:

- H303: May be harmful if swallowed.
- H305: May be harmful if swallowed or enters airways.
- H316: Causes mild skin irritation.
- H319: Causes serious eye irritation.
- H335: May cause respiratory irritation.
- H361: Suspected of damaging fertility or the unborn child.
- H370: Causes damage to organs (Central Nervous system, Kidney, Systemic Toxicity)

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H372: Causes damage to organs (Blood vessel, Liver, Spleen) through prolonged or repeated exposure.

**Environmental Hazards:** Not classified as environmental hazards under GHS criteria.

**GHS Precautionary Statement****Prevention:**

- P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking.  
P233: Keep container tightly closed.  
P240: Ground/bond container and receiving equipment.  
P241: Use explosion-proof electrical/ventilating/lighting equipment.  
P242: Use only non-sparking tools.  
P243: Take precautionary measures against static discharge.  
P260: Do not breathe dust/fume/gas/mist/vapors/spray.  
P264: Wash hands thoroughly after handling.  
P270: Do not eat, drink, or smoke while product is in use.  
P271: Use only outdoors or in a well-ventilated area.  
P281: Use protective equipment as required.

**Response:**

- P303+P361+P353: If on Skin (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower.  
P370+P378: In case of fire: Use appropriate media for extinction.  
P305+P351+P338: If in Eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.  
P337+P313: If eye irritation persists: Get medical advice/attention.  
P308+P313: If exposed or concerned: Get medical advice/attention.  
P304+P340: If Inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P301+P312: If Swallowed: Immediately call a Poison Center or doctor/physician if you feel unwell.  
P331: Do Not induce vomiting.

**Storage:**

- P403+P233: Store in a well-ventilated place. Keep container tightly closed.  
P235: Keep cool.  
P405: Store locked up.

**Disposal**

- P501: Dispose of contents and container to appropriate waste site or reclaimer in accordance with local and national regulations.

**Other Hazards Which Do Not Result in Classification**

Breathing of high vapor concentrations may cause dizziness, light-headedness, headache, nausea and loss of coordination.  
Continued inhalation may result in unconsciousness.  
Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

**Aggravated Medical Condition**

N/A

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### 3. COMPOSITION/ INFORMATION ON INGREDIENTS CAS NUMBER: 67-63-0

Chemical Name	CAS Number	Concentration
Propan-2-ol	67-63-0	>99.9%

### 4. FIRST AID MEASURES

Inhalation, Skin Contact, Eye Contact, Ingestion



Medical attention. Emergency shower. Emergency eyewash.

### 5. FIRE FIGHTING MEASURE

**Appropriate Extinguishing Media:**

- CO<sub>2</sub>
- Alcohol Resistance Foam
- Dry Chemical
- Water Fog

**Inappropriate Extinguishing Media:**

- Water Jet

### 6. ACCIDENTAL RELEASE MEASURES

- Eliminate ignition sources. Prevent liquid enters sewers, water sources, low area.
- Spill with sand, earth. Dilute contained spill with water. Dispose recover material conforms to local regulation.
- Keep public away.

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### 7. HANDLING AND STORAGE

**Storage/ Transport Temperature:**  
Ambient

**Loading/ Unloading Temperature:**  
Ambient

Ensure all equipment is electrically grounded before beginning transfer operations.  
Take precautionary measures against static discharge.  
Keep away from heat and sources of ignition.  
Avoid breathing mists or vapour. Avoid contact with skin.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Engineering Control Measures/Ventilation

Use Local exhaust ventilation to control process.  
Provide mechanical ventilation of confined spaces.  
Use explosion-proof ventilation equipment.

#### Occupational Exposure Limits (OEL) Values

Propan-2-ol  
- STEL: 400ppm  
- TWA: 200ppm

#### Personal Protection



Vapor respirator. Gloves. Goggles. Full suit. Footwear.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State:</b>	Liquid
<b>Form/Color:</b>	Clear / Colourless
<b>Odor:</b>	Sharp musty odor like rubbing alcohol
<b>Flash Point (TCC ASTM D56):</b>	11.7°C
<b>Boiling Point / Range:</b>	83°C
<b>Specific Gravity(20.0/20.0):</b>	0.787°C
<b>Density (15°C):</b>	N/A
<b>Freezing/Melting Point:</b>	-90°C
<b>Auto-ignition Temperature:</b>	456°C
<b>Evaporation Rate (Ether=1):</b>	N/A
<b>Vapor Pressure (25°C):</b>	4.4 kPa
<b>Viscosity (20°C):</b>	N/A
<b>Solubility in Water (20°C):</b>	Soluble
<b>Explosive Limits (in air):</b>	2 – 12vol%
<b>Vapor Density (101.3kPa/air = 1):</b>	2.1
<b>Molecular Weight:</b>	60.1g/mol
<b>Coeff. Of Thermal Expansion (liq):</b>	N/A
<b>Odor Threshold:</b>	N/A
<b>pH:</b>	N/A
<b>Material Hygroscopic:</b>	N/A
<b>Log Pow: (n-Octanol/Water Partition Coefficient)</b>	0.05

**10. STABILITY AND REACTIVITY**

<b>Hazardous Polymerization:</b>	Will not occur	<b>Conditions to Avoid Polymerization:</b>	N/A
<b>Stability:</b>	Stable	<b>Conditions to Avoid Instability:</b>	N/A
<b>Materials and Conditions to Avoid:</b>	Strong oxidizing agents. Avoid heat, sparks, flames, elevated temperatures.		
<b>Hazardous Decomposition Products:</b>	Thermal decomposition, carbon oxides.		

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**11. TOXICOLOGICAL INFORMATION**

<b>Inhalation:</b>	Irritation to respiratory tract. May cause dizziness. May affect central nervous system.
<b>Skin Contact:</b>	Defat, dry skin. Low order of toxicity.
<b>Eye Contact:</b>	May cause discomfort to the eyes. Will not injure eye tissue.
<b>Ingestion:</b>	Minimal toxicity, small amounts may cause bronchopneumonia or pulmonary edema.

**12. ECOLOGICAL INFORMATION**

<b>Environmental Mobility:</b>	Substance is water-soluble and is a volatile substance.
<b>Environmental Degradability:</b>	N/A
<b>Ecotoxicity and Bioaccumulation:</b>	Low bioaccumulation. Not classified as environmentally hazardous. possibility of harming or damaging environment.

**13. DISPOSAL CONSIDERATIONS**

- Combine with other materials to indicate another route of disposal.
- Recycle, recover or dispose empty drums through a suitably qualified or licensed contractor.
- Ensure compliance with national and local regulations.
- NOT suitable for disposal by either landfill or via municipal sewers, drains, natural streams or rivers.
- This product is ash less and can be burned directly in appropriate equipment.
- Contact Transmare-Chemie or local Authorities for more information.

**14. TRANSPORT INFORMATION**

	<b>Land</b>	<b>Sea</b>	<b>Air</b>
<b>Class</b>	3	3	3
<b>Packing Group</b>	II	II	II
<b>UN Number</b>	1219	1219	1219
<b>Transport Document Name</b>	Isopropanol, Class 3, PG II, UN1219, (11.7°C c.c.)	Isopropanol, Class 3, PG II, UN1219, (11.7°C c.c.)	Isopropanol
<b>Others</b>	<b>Hazchem Code:</b> 2YE	<b>Marine Pollutant:</b> No <b>EmS:</b> F-E, S-D <b>Risk Label:</b> 3	

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**15. REGULATORY INFORMATION****Material is hazardous according to GHS Criteria****REGULATORY STATUS AND APPLICABLE LAWS AND REGULATIONS**

- AICS
- DSL
- IECSC
- EINECS
- ELINCS
- ENCS
- ECL
- PICCS
- TSCA
- New Zealand Inventory

**16. OTHER INFORMATION****Revision Date on 27 February 2023**

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 Transmare-Chemie Company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.