




Safety Data Sheet: ISOPROPYL ALCOHOL

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION	
Identification of the Substance: Isopropyl Alcohol	Chemical Family: Alcohol
Product Description: Clear colorless liquid	
Supplier: O.M.M. Graphic Sdn Bhd 7, Jalan TIAJ 2/9, Taman Industri Alama Jaya, Bandar Puncak Alam,42300 Selangor, Malaysia Telephone: 603-60386872 Email: info@ommgraphic.com Website: www.ommgraphic.com	
2. HAZARDS IDENTIFICATION	
GHS Classification: Flammable Liquids, Category 2 Serious Eye Damage/Irritation, Category 2A Acute Toxicity Oral, Category 5 Specific Target Organ Systemic Toxicity (Single Exposure), Category 3 Narcotic effects Aspiration Hazard, Category 2	
GHS Label Elements	
Symbol(s) :	  
Signal Words :	Danger
GHS Hazards Statement	
Physical Hazards :	H225: Highly Flammable liquid and vapor.
Health Hazards :	H319: Causes serious eye irritation. H303: May be harmful if swallowed. H336: May cause drowsiness or dizziness. H305: May be harmful if swallowed or enters airways.
Environmental Hazards: Not classified as environmental hazards under GHS criteria.	
GHS Precautionary Statements	
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. P261: Avoid breathing dust/fume/gas/mist/vapors/spray. P264: Wash hands thoroughly after handling. P271: Use only outdoors or in a well-ventilated area. P280: Wear protective gloves/protective clothing/eye protection/face protection.
Response :	P303+P361+P353: If on Skin (or hair): Remove/take off 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. P304+P340: If Inhaled: Remove to fresh air and keep at rest in a position comfortable for breathing. P312: Call a Poison Center or doctor/physician if you feel unwell. P301+P310: If Swallowed: Immediately call a Poison Center or doctor/physician. P331: Do Not induce vomiting.
Storage :	P403+P235: Store in a well-ventilated place. Keep cool. P233: Keep container tightly closed. 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

Vapours are heavier than air. Vapours may travel across the ground and reach remote ignition sources causing a flashback fire danger.

Electrostatic charges may be generated during pumping.

Electrostatic discharge may cause fire.

Slightly irritating to respiratory system.

Aggravated Medical Condition

Pre-existing medical conditions of the following organ(s) or organ system(s) may be aggravated by exposure to this material: Eyes. Skin. Respiratory system.

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

Chemical Name	CAS Number	Hazard Class (Category)	Hazard Statement	Concentration
Isopropyl Alcohol	67-63-0	Flam. Liq.,2; Eye Irrit,2; STOT SE,3;	H225;H319;H336	100%

4. FIRST AID MEASURES

Inhalation, Skin Contact, Eye Contact, Ingestion



Medical attention. Emergency shower. Emergency eyewash.

5. FIRE FIGHTING MEASURES

Extinguishing Media:

CO₂ Alcohol Resistance Foam Dry Chemical Water Spray Fog/Sand/Earth

Procedures:

- Use water spray to cool fire-exposed surfaces, protect personnel, and shut off "fuel" to fire.
- Allow fire to burn under controlled conditions, extinguish with alcohol type foam or dry chemical. Cover liquid spills with foam.

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.

7. HANDLING AND STORAGE

Storage/Transport Temperature: Ambient	Loading/Unloading Temperature: Ambient
Loading/Unloading Viscosity: 2.65	Storage/Transport Pressure: Atmospheric
Electrostatic Accumulation Hazard: No	Shipping Containers: Rail wagons, barges or drums
Materials Suitable: Carbon steel, stainless steel, polyethylene, polypropylene, polyester, teflon.	Material Unsuitable: Natural Rubber, Butyl Rubber, Polystyrene, EPDM

- Keep container closed, store cool and well-ventilated. Open slowly to control released pressure.
- Keep away from flame, direct sunlight.
- Do not reuse empty containers w/o cleaning. Observe all precautions for empty product containers.

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: TWA: 400 ppm (983 mg/m³) STEL: 500 ppm (1230 mg/m³), ACGIH (2000)

Personal Protection:



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

9. PHYSICAL AND CHEMICAL PROPERTIES (Also refer to Product Specification Sheet)

Physical State: Liquid	Form/Color: Clear colourless liquid
Odor: Alcohol Odour	Odor Threshold: N/A
pH: N/A	Freezing/Melting Point: -85°C
Boiling Point Range: 82 - 83°C	Flash Point (TCC ASTM D56): 12°C
Explosive Limits (in air): 1.8 - 12vol%	Vapor Pressure (20°C): 4.3kPa
Auto-ignition Temperature: >350 °C	Density (20°C): 0.785g/cm ³
Specific Gravity (20.0/20.0): 0.785	Viscosity Density (101.3kPa/air = 1): >1.00
Solubility in Water (20°C): 100.00wt%	Material Hygroscopic: Yes
Viscosity (20°C): 2.65cSt	Evaporation Rate (n-Bu Acetate=1): 2.500
Coeff. of Thermal Expansion (liq): 0.00107°C	Molecular Weight: 60

10. STABILITY AND REACTIVITY

Hazardous Polymerization: No	Conditions to Avoid Polymerization: NA
Stability: Stable	Conditions to Avoid Instability: NA
Materials and Conditions to Avoid: Strong oxidizing agents	
Hazardous Decomposition Products: None	

11. TOXICOLOGICAL INFORMATION

Inhalation: Irritating to eyes and respiratory tract. Cause dizziness. Affect other central nervous system.

Skin Contact: Defat, dry skin. Low order of toxicity.

Eye Contact: Irritating to eyes. Will injure eye tissue if not removed promptly.

Ingestion: Minimal toxicity, small amounts may cause bronchopneumonia or pulmonary edema.

12. ECOLOGICAL INFORMATION

Environmental Mobility: Substance is water-soluble and remains primarily in water.

Environmental Degradability: Biodegrade rapidly. Removed in wastewater treatment facility.

Ecotoxicity and Bioaccumulation: Low acute toxicity to aquatic organisms is expected. Long-term adverse effects to aquatic organisms are not expected.

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..

14. TRANSPORT INFORMATION

	Land	Sea	Air
Class	3	3	3
PG	II	II	II
UN Number	1219	1219	1219
Subsidiary Risk	Nil	Nil	Nil
Transport Document Name	Isopropanol (Isopropyl Alcohol), Class 3, UN 1219 PG II, (12°C c.c.)	Isopropanol (Isopropyl Alcohol), Class 3, UN 1219 PG II, (12°C c.c.)	Isopropanol (Isopropyl Alcohol), Class 3, UN 1219 PG II, (12°C c.c.)
Others	Hazchem Code: 2YE	Marine Pollutant: No EMS Number: 3 - 06 Risk label: 3	

15. REGULATORY INFORMATION

Classification and Labeling Classification/Symbol: Highly Flammable/F Classification/Symbol: Irritant/Xi	Governing Directive: Dangerous substances directive 67/548/EC. Label Name: Propan-2-OL (Isopropyl Alcohol)
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16. OTHER INFORMATION

Revision Date on 20 January 2015. This MSDS has been revised in Section(s): 2, 3, 5, 15

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.