



MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF MATERIAL/SUPPLIER

Product Name : ISOPROPANOL (ISOPROPYL ALCOHOL)
Other Names : ISOPROPYL ALCOHOL ; 2-PROPANOL ;
PROPAN-2-OL ;
Chemical Formula : (CH3)2CH2O

Uses

Manufacture of acetone and its derivatives, manufacture of glycerol and isopropyl acetate, solvent for essential and other oils, alkaloids, gums, resins, etc, latent solvent for cellulose derivatives, coatings solvent, deicing agent for liquid fuels, lacquers, extraction processes, dehydrating agent, preservative, lotions, denaturant.

Contact Information

Organisation Location Telephone Ask For
Redox Pty Ltd 2 Swettenham +61 2 Technical
Road 97333000 Officer
Australia

11 Mayo Road +64 9
Wiri Auckland 2506222
2104
New Zealand

Poisons Information Centre Australia 131126
Chemcall 24 Hour Australia 1800127406
Chemcall New Zealand +64 3 3530199
Emergency Number New Zealand 0800 243622
National Poisons Centre New Zealand 0800 764766.000

2. HAZARDS IDENTIFICATION

Hazardous according to criteria of Worksafe Australia
FLAMMABLE
IRRITANT



MATERIAL SAFETY DATA SHEET

Risk Phrases

R11 Highly flammable.
 R36 Irritating to eyes.
 R67 Vapours may cause drowsiness and dizziness.

Safety Phrases

S2 Keep out of reach of children.
 S7 Keep container tightly closed.
 S16 Keep away from sources of ignition - No smoking.
 S24/25 Avoid contact with skin and eyes.
 S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Entity	C.A.S. No.	Proportion
ISOPROPYL ALCOHOL	[67-63-0]	100%

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Ingestion

Rinse mouth with water. Give water to drink provided victim is conscious. Do NOT induce vomiting. Seek immediate medical attention.

Eye

Immediately flush eyes with plenty of water holding eyelids open. Seek medical attention.

Skin

Remove contaminated clothing. Wash affected area with soap and plenty of water. If irritation persists, seek medical attention.

Inhaled

Remove victim from exposure to fresh air. If not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Seek immediate medical attention.

Advice to Doctor

Treat symptomatically based on individual reactions of patient and judgement of doctor.

NOTE: For advice in an emergency, contact a Poisons Information Centre (Australia 13-11-26 or New Zealand 0800-764-766).

MATERIAL SAFETY DATA SHEET

Aggravated medical conditions caused by exposure

No information available on medical conditions which are aggravated from exposure to this product.

5. FIRE FIGHTING MEASURES

Extinguishing Media

Product is a flammable liquid!

In case of fire, appropriate extinguishing media include water spray, alcohol-resistant foam, dry chemical and carbon dioxide. Water spray may be used to cool fire-exposed containers.

Hazard from Combustion Products

Flammable liquid. Vapours are heavier than air and may travel to an ignition source and flash back. Vapours can spread along the ground and collect in low or confined areas. Incompatible with oxidizing agents, acids, halogenated compounds and sources of ignition. When involved in a fire, this product may generate carbon monoxide and carbon dioxide.

Special protective precautions and equipment for fire fighters

Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves). Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas where gases or fumes can accumulate. Do not use direct water stream. Eliminate ignition sources.

Hazchem Code : 2YE

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Personnel involved in the clean up should wear full protective clothing. Evacuate all unnecessary personnel. Eliminate all sources of ignition. Increase ventilation. Avoid walking through spilled product as it may be slippery. Stop leak if safe to do so. Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management. Use clean, non-sparking tools and equipment.

Methods and materials for containment and clean up

Soak up spilled product using absorbent non-combustible material such as sand or soil. Avoid using sawdust or cellulose. When saturated collect material, transfer to suitable, labelled, dry chemical-waste containers and dispose of promptly as hazardous waste.

MATERIAL SAFETY DATA SHEET

7. HANDLING AND STORAGE

Precautions for safe handling

Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Take precautionary measures against static discharges by bonding and grounding equipment. Avoid contact with eyes, skin and clothing. Do not inhale product vapours.

Conditions for safe storage, including any incompatibles

Store in a cool, dry, well-ventilated, fire-proof area. Keep containers tightly sealed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Ground and bond storage containers. Store away from incompatible materials including oxidizing agents, acids, halogenated compounds and ignition sources. Protect from direct sunlight, moisture and electrostatic charges. This product has a UN classification 1219 and a Dangerous Goods Class 3 (flammable) according to The Australian Code for the Transport of Dangerous Goods By Road and Rail.

Container Type

Packaging must comply with requirements of Hazardous Substances (Packaging) Regulations 2001. Store in original packaging as approved by manufacturer.

NOTE: Use approved 'flammable liquid' storage containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National Exposure Standards

The following exposure standard has been established by The Australian Safety and Compensation Council (ASCC);

Isopropyl Alcohol cas: 67-63-0 TWA = 400ppm (983mg/m3)
 STEL = 500ppm (1230mg/m3)

NOTE: The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week.

Biological Limit Values

No information available on biological limit values for this product.

Engineering Controls

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Use a flame proof exhaust ventilation system.

Personal Protection

RESPIRATOR: Wear an approved respirator with suitable filter for organic gases and vapours if engineering controls are inadequate (AS1715/1716).

EYES: Chemical goggles to prevent splashing in the eyes (AS1336/1337).

HANDS: Butyl rubber gloves break through time 4hr (AS2161).

CLOTHING: Flame-retardant coveralls and anti-static footwear (AS3765/2210).

MATERIAL SAFETY DATA SHEET

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: clear, colourless
Odour	: aromatic odour
Vapour Pressure	: 43.996hPa (20'C)
Vapour Density	: 2.08
Boiling Point	: 82.22
Melting Point	: -88.5
Solubility in water	: Soluble
Specific Gravity	: 0.785g/cm3
Flash Point	: Close Cup 12
pH	: No Data
Flammability Limits (as percentage volume in air)	
Lower Explosion Limit	: 2%
Upper Explosion Limit	: 12%
Ignition Temperature	: 398.89
Specific Heat Value	: 0.65cal/g
Particle Size	: N/A
Volatile Organic Compounds (VOC) Content	: N/A
Evaporation Rate	: N/A
Viscosity	: 2.4mPa.s
Percent Volatile	: N/A
Octanol/Water partition coefficient	: N/A
Saturated Vapour Concentration	: N/A
Additional Characteristics	: N/A
Flame Propagation/Burning Rate of Solid Materials	: N/A
Properties of materials that may initiate or contribute to fire intensity	: N/A
Potential for Dust Explosion	: Product is a liquid.
Reactions that Release Flammable Gases	: N/A
Fast or Intensely Burning Characteristics	: N/A
Non-flammables that could contribute unusual hazards to a fire	: N/A
Release of invisible flammable vapours and gases	: N/A
Decomposition Temperature	: N/A

Additional Information

Molecular Weight: 60.1g/mol
 Flash Point: 18'C (open cup)
 Refractive Index: 1.3756 (20'C)
 Critical Temp: 235'C
 Solubility: Soluble in water, alcohol and ether.

10. STABILITY AND REACTIVITY

Chemical Stability

Product is stable under directed conditions of use, storage and temperature.
 Flammable liquid.

MATERIAL SAFETY DATA SHEET

Conditions to Avoid

Avoid excessive heat, direct sunlight, moisture, freezing, static discharges and high temperatures.

Incompatible Materials

Incompatible with oxidizing agents, acids, halogenated compounds and sources of ignition.

Hazardous Decomposition Products

When involved in a fire, this product may generate carbon monoxide and carbon dioxide.

Hazardous Reactions

Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicity Data

Oral LD50 Rat: 5045mg/Kg
 Oral LD50 Rabbit: 6410mg/Kg
 Oral LD50 Mouse: 3600mg/Kg
 Inhale LC50 Rat: 16000mg/L (8hr)
 Skin LD50 Rabbit: 12800mg/Kg
 Skin Irritation: Mildly irritating to rabbit skin.
 Eye Irritation: Moderately irritating to rabbit eyes.
 Carcinogenicity: Isopropanol cas 67-63-0 Group 3 (Not classifiable as to carcinogenicity to humans)

Ingestion

Ingestion may cause gastro-intestinal pain, cramps, nausea, vomiting, diarrhea, drowsiness and unconsciousness.

Eye

Vapours may cause eye irritation. Splashes may cause severe eye irritation.

Skin

May cause skin irritation, redness and pain.

Inhaled

Inhalation of vapours may irritate the respiratory tract. Exposure to high concentrations has a narcotic effect, including symptoms of dizziness, drowsiness, headache, staggering and unconsciousness.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Fish LC50 Poecilia reticulata 7d: 7060mg/L
 Fish LC50 Pimephales promelas 96hr: 9640mg/L

MATERIAL SAFETY DATA SHEET

Persistence and degradability

No information available on persistence/degradability for this product.

Mobility

No information available on mobility for this product.

Environmental Fate

Do NOT let product reach drains, sewers or waterways.

Bioaccumulative potential

No information available on bioaccumulation for this product.

13. DISPOSAL CONSIDERATIONS

Disposal

Dispose of in accordance with all local, state, and federal regulations.

Special Precautions for land fill or incineration

This should be done in accordance with 'The Hazardous Waste Act'.
Contact a specialist disposal company or the local waste regulator for advice.

14. TRANSPORT INFORMATION

Road Transport / Australia

Regulation	: ADG
Shipping Name	: ISOPROPANOL (ISOPROPYL ALCOHOL)
UN Number	: 1219
Dangerous Goods Class	: 3 Flammable Liquid
Subsidiary Risk(s)	: None Allocated
Pack Group	: II
Hazchem Code	: 2YE
EPG	: 16

Road Transport / New Zealand

Regulation	: NZS5433
Shipping Name	: ISOPROPANOL (ISOPROPYL ALCOHOL)
UN Number	: 1219
Dangerous Goods Class	: 3 Flammable Liquid
Subsidiary Risk(s)	: None Allocated
Pack Group	: II
Hazchem Code	: 2YE
EPG	: 16
Special Precaution for User	: FLAMMABLE

Sea Transport

MATERIAL SAFETY DATA SHEET

Regulation	: IMDG
Shipping Name	: ISOPROPANOL (ISOPROPYL ALCOHOL)
UN Number	: 1219
Dangerous Goods Class	: 3 Flammable Liquid
Subsidiary Risk(s)	: None Allocated
Pack Group	: II
Hazchem Code	: 2YE
EPG	: 16
Maritime Pollutant	: None Allocated
EMS	: N

15. REGULATORY INFORMATION

Classified as hazardous according to The Australian Safety and Compensation Council (ASCC) and Annex I European Directive 67/548/EEC.
 EINECS No: 200-661-7 Propan-2-ol

Poisons Schedule	: N/A
AICS Name	: 2-PROPANOL
NZ Toxic Substance	: N
HSNO Hazard Classification	: 3.1B 6.1E 6.3B 6.4A
ERMA Approval Code	: HSR001180

Additional Information

No Data Available

16. OTHER INFORMATION

Revision Date : MAR 2007

Legend to abbreviations and acronyms

No Data Available

Literature references

No Data Available

Sources for data

No Data Available