

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: ChemTools isopropyl alcohol (IPA)
Product Type: Solvent for industrial use.
Company Address: ChemTools Pty. Ltd., PO Box 4319, Penrith, NSW 2750
Ph: 02 4635 3746
EMERGENCY PHONE: Australia: Poisons Information Centre 13 1126
International: Infotrac (708) 918 1900

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components	CAS #	%	HSIS TWA	HSIS STEL
Propan-2-ol	67-63-0	100	400ppm (983mg/m ³)	500ppm (1,230mg/m ³)

3. HAZARDS IDENTIFICATION

Hazard Classification: Hazardous Substance, Dangerous Goods.
Risk Phrases: R11 – Highly flammable
R36/38 – Irritating to eyes and skin.
R67 – Vapours may cause drowsiness and dizziness.
Safety Phrases: S2 – Keep out of reach of children
S7 – Keep container tightly closed
S21 – When using do not smoke
S51 – Use only in well ventilated areas.
S24/25 – Avoid contact with skin and eyes.
Relevant routes of exposure: Skin, Inhalation, Eyes
Potential Health Effects
Inhalation: May cause respiratory tract irritation. High concentrations of vapours may cause headache, fatigue, drowsiness and dizziness.
Skin contact: May cause allergic skin reaction. May cause skin irritation. Product has a defatting effect on skin. Prolonged contact may cause dryness of skin.
Eye contact: Contact with eyes will cause irritation.

4. FIRST AID MEASURES

Inhalation: Remove to fresh air. If symptoms develop and persist, get medical attention.
Skin contact: Wash with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse.
Get medical attention if symptoms occur.
Eye contact: Check for and remove any contact lenses. Immediately flush with copious amounts of water, preferably, lukewarm water for at least 15 minutes, holding eyelids open all the time. Get medical attention.
Ingestion: Do not induce vomiting. Rinse mouth thoroughly. Loosen any tight clothing. Keep individual calm. Obtain medical attention.

5. FIRE-FIGHTING MEASURES

Flash point: 12°C (Abel)
Autoignition temperature: 425°C (ASTM D-2155)
Flammable/Explosive limits-lower %: 2%
Flammable/Explosive limits-upper %: 12%
Extinguishing media: Alcohol resistant foam, dry chemical or carbon dioxide.
Special fire fighting procedures: None
Unusual fire or explosion hazards: None
Hazardous combustion products: Oxides of carbon. Keep run-off water out of sewers and water sources.
Hazchem Code: 2[Y]E

6. ACCIDENTAL RELEASE MEASURES

Environmental precautions: Extinguish all ignition sources. Ventilate well. Use approved respirator if air contamination is above accepted level. Prevent product from entering drains or open waters.
Clean-up methods: Soak up with inert absorbent. Store in a partly filled, closed container until disposal.

7. HANDLING AND STORAGE

Handling:	Avoid contact with eyes, skin and clothing. Avoid breathing vapour and mist. Wash thoroughly after handling.
Storage:	For safe storage, store at or below 38°C (100°F). Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.
Incompatible products:	Refer to Section 10.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls:	No specific ventilation requirements noted, but forced ventilation may still be required if concentrations exceed occupational exposure limits.
Respiratory protection:	Use NIOSH approved respirator if there is potential to exceed exposure limit(s).
Skin protection:	Use impermeable gloves and protective clothing as necessary to prevent skin contact. Neoprene gloves. butyl rubber gloves. Natural rubber gloves.
Eye/face protection:	Safety goggles or safety glasses with side shields.
See Section 2 for exposure limits.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid.
Colour:	Clear, colourless.
Odour:	Organic solvents.
pH:	Not available
Boiling point/range:	82-83°C.
Melting point/range:	-88°C
Specific gravity:	0.785 at 20°C.
Vapour density:	2 at 20°C (air=1)
Evaporation rate:	1.5 (ASTM D-3539, nBuAc=1)
Solubility in water:	Completely miscible.

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of use.
Hazardous polymerization:	Will not occur.
Hazardous decomposition products:	Oxides of carbon.
Incompatibility:	Strong oxidizers. Strong acids.
Conditions to avoid:	See "Handling and Storage" (Section 7) and "Incompatibility" (Section 10).

11. TOXICOLOGICAL INFORMATION

Product toxicity data:

Propan-2-ol Oral: LD₅₀ >2,000 mg/Kg (rat). Skin: LD₅₀ >2,000mg/Kg (rabbit) Inhalation LC₅₀:20mg/L/8hr (rat)

12. ECOLOGICAL INFORMATION

Acute Toxicity	Fish: Low Toxicity: LC/EC/IC50 >100mg/L Aquatic Invertebrates: Low Toxicity: LC/EC/IC50 >1000mg/L Algae: expected to have Low Toxicity: LC/EC/IC50 >1000mg/L Microorganisms: Low Toxicity: LC/EC/IC50 >1000mg/L
Mobility:	Dissolves in water If product enters soil, it will be highly mobile and may contaminate groundwater
Persistence/degradability:	Readily biodegradable meeting the 10 day window criterion. Oxidises rapidly by photo-chemical reactions in air.
Bioaccumulation :	Not expected to bioaccumulate significantly.

13. DISPOSAL CONSIDERATIONS

Recommended method of disposal:	Recover or recycle if possible. Dispose of according to Federal, State and local governmental regulations.
Container disposal:	Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Recycle if possible.

14. TRANSPORT INFORMATION

ADG:
Proper shipping name: Isopropanol
UN No.: 1219
Class: 3
Hazchem code: 2[Y]E
Packing group: II

IMDG:
Proper shipping name: Isopropanol
Identification No.: UN 1219
Class: 3
Packing group: II
Marine pollutant: No

IATA (country variations may occur):
Proper shipping name: Isopropanol
Identification No.: UN 1219
Class: 3
Packing group: II

15. REGULATORY INFORMATION

Poisons Schedule (SUSDP): Not Listed.
AICS: Listed.
DSL: Listed.
INV (CN) Listed.
ENCS (JP) Listed. (2)-207
ISHL (JP) Listed. 2-(8)-319
TSCA Listed.
EINECS Listed. 200-661-7
KECI (KR) Listed. KE-29363
PICCS (PH) Listed.

16. OTHER INFORMATION

Abbreviations/Acronyms: ACGIH – American Conference of Government Industrial Hygienists.
ADG – Australian Dangerous Goods.
HSIS - Hazardous Substances Information System.
IARC – International Agency for Research on Cancer.
NIOSH – National Institute of Occupational Health and Safety.
NOHSC – National Occupational Health and Safety Commission.
PEL – Permissible Exposure Limit.
STEL – Short Term Exposure Limit.
SUSDP – Standard for the Uniform Scheduling of Drugs and Poisons.
TLV – Threshold Limit Value.
TWA – Time Weighted Average.

DISCLAIMER:

The information contained within this MSDS applies only to the ChemTools product to which the sheet relates. The information provided is based on our best knowledge at the time of issue.

The information contained within this MSDS is believed to be accurate and is given in good faith. However, no warranty is made, either expressed or implied, regarding its accuracy or any liability arising out of the use of the information herein or the product supplied.

When used in other preparations, formulations, or in mixtures, it is necessary to ascertain whether the classifications of the hazards have changed. The attention of the user is drawn to the possibility of creating other hazards when the product is used for purpose other than that for which it was recommended. In such cases, a reassessment may be necessary and should be made by the user.

This safety data sheet should only be used and reproduced in order that the necessary measures are taken relating to the protection of health and safety at work.

It is the responsibility of the handlers to pass on the totality of the information contained within this document to any subsequent person(s) who will come in to contact with, handle or use this product in any way.

They should check the adequacy of the information provided within this MSDS before passing it on to their customers/staff.