

# SAFETY DATA SHEET

## SECTION 1 IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

<b>Product Identifier</b>	<b>ISOPROPYL ALCOHOL</b>
<b>Other Names</b>	sec-Propyl Alcohol, 2-Propanol, Isopropanol, IPA
<b>Manufacturer's Product Code</b>	16235
<b>Recommended Use</b>	Solvent, cleaner

### Details of Supplier/Manufacturer

Company:	Sierra Aust ABN: 51 101 066 022
Address:	17 Delta Street, Geebung, Queensland 4034
Phone:	(07) 3216 5099 Fax: (07) 3216 5199
Website:	www.sierrachem.com.au



### Emergency Telephone Numbers

Business Hours:	(07) 3216 5099
Poisons Information:	Australia: 13 11 26 New Zealand: 0800 764 766

## SECTION 2 HAZARDS IDENTIFICATION

<b>Hazardous chemical</b>	<i>according to classification by Safe Work Australia</i>
<b>Dangerous goods</b>	<i>according to the Australian Code for the Transport of Dangerous Goods by Road and Rail</i>

<b>Signal Word</b>	<b>DANGER</b>
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GHS Classification	Pictogram	Hazard statement
Flammable Liquids, Category 2	 FLAME	H225 Highly flammable liquid and vapour
Serious Eye Damage/Irritation, Category 2A	 EXCLAMATION MARK	H319 Causes serious eye irritation
Specific Target Organ Toxicity (Single exposure), Category 3		H336 May cause drowsiness or dizziness

**Product: ISOPROPYL ALCOHOL****Precautionary statements:**

<b>GENERAL</b>	
P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P103	Read label before use
<b>PREVENTATIVE</b>	
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/ventilation/lighting equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P261	Avoid breathing mist/vapours/spray
P264	Wash thoroughly after handling
P271	Use only outdoors or in a well-ventilated area
P280	Wear eye protection/face protection
<b>RESPONSE</b>	
P303 + P361 + P353	IF ON SKIN (or hair): Take off contaminated clothing and wash before reuse. Rinse skin with water/shower
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P312	Call a POISON CENTER or doctor/physician if you feel unwell
P337 + P313	If eye irritation persists: Get medical advice/attention
P370 + P378	In case of fire: Use foam/water spray/fog for extinction
<b>STORAGE</b>	
P403 + P233	Store in a well-ventilated place. Keep container tightly closed
P403 + P235	Store in a well-ventilated place. Keep cool
P405	Store locked up
<b>DISPOSAL</b>	
P501	Dispose of contents/container in accordance with local regulations

**SECTION 3 COMPOSITION AND INFORMATION ON INGREDIENTS****Ingredients Names and Proportions**

Chemical Entity	CAS Number	Proportion (%)
Isopropyl Alcohol	67-63-0	> 99

**SECTION 4 FIRST AID MEASURES****Description of necessary first aid measures**

Inhalation:	Remove victim from exposure if safe to do so. If rapid recovery does not occur, transport to nearest medical facility for additional treatment. Remove contaminated clothing.
Skin Contact:	If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water and follow by washing with soap if available. If irritation occurs seek medical advice.
Eye Contact:	If in eyes, hold eyes open, flood with water for at least 15 minutes. If symptoms persist, transport to nearest medical facility for additional treatment.
Ingestion:	If swallowed, do NOT induce vomiting. Transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below

**Product: ISOPROPYL ALCOHOL**

	hips to prevent aspiration.
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**Symptoms caused by exposure**

Inhalation:	Breathing of high vapour concentrations may cause central nervous system depression resulting in headaches, dizziness, nausea, loss of coordination, impaired judgement; continued inhalation may result in unconsciousness and/or death.
Skin:	Not irritating to skin.
Eye:	May include burning sensation, redness, swelling and/or blurred vision.
Ingestion:	May include nausea, vomiting and central nervous system depression (as for inhalation).

**Medical attention and special treatment**

Treat symptomatically.

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**SECTION 5 FIRE FIGHTING MEASURES**

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**Suitable extinguishing equipment**

Alcohol stable foam, water spray or fog. Dry chemical powder, carbon dioxide may be used for small fires only. Do not use water in a jet.

**Specific hazards arising from the chemical**

Highly flammable liquid. Carbon monoxide and/or carbon dioxide may be evolved. The vapour is heavier than air, spreads along the ground and distant ignition is possible.

**Special protective equipment and precautions for fire fighters**

Wear full protective clothing and self-contained breathing apparatus. Hazchem code ●2YE.

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**SECTION 6 ACCIDENTAL RELEASE MEASURES**

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**Personal precautions, protective equipment and emergency procedures**

Avoid contact with spilled or released material. Shut off leaks, if possible without personal risks. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Remove all sources of ignition in the surrounding area. Take precautionary measure against static discharge. Ensure electrical continuity by bonding and earthing all equipment. Spills can be converted to non-flammable mixtures by dilution with water.

**Environmental precautions**

Use appropriate containment to avoid environmental contamination. Prevent from spreading and entering waterway using sand, earth or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Ventilate contaminated area thoroughly.

**Methods and materials for containment and cleaning up**

For small spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.  
For larger spills (> 1 drum), transfer by means such as a vacuum truck to a salvage tank for recovery or disposal. Do not flush residues with water. Retain as contaminated waste. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

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**SECTION 7 HANDLING AND STORAGE**

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**Precautions for safe handling**

Highly flammable product. Avoid breathing vapours. Handle and open containers with care in a well-ventilated area. Ensure that the workplace is ventilated such that the Occupational Exposure limit is not exceeded. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in contaminated areas. Electrostatic charges may be generated during transfer. Electrostatic discharge may cause fire. Ensure electrical continuity by earthing all equipment.

**Conditions for safe storage, including any incompatibilities**

Store in a well-ventilated area, away from sunlight, ignition sources and other sources of heat. Do not store near strong oxidants.

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**SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION**

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**Exposure control measures**

From National Occupational Health & Safety Commission (NOHSC) Worksafe Australia - Isopropyl Alcohol: 983mg/m<sup>3</sup> (400ppm) TWA (8hr), 1230mg/m<sup>3</sup> (500ppm) STEL

**Biological monitoring**

No biological limit allocated.

**Engineering controls**

Ensure that adequate ventilation is provided. Maintain air concentrations below recommended exposure standards. Avoid generating and inhaling mists and vapours. Keep containers closed when not in use.

**Individual protection measures**

Eye and face protection:	Wear safety goggles.
Skin protection:	Use solvent resistant gloves, nitrile for longer term protection or PVC and neoprene for incidental splashes.
Respiratory protection:	If work practices do not maintain airborne level below the exposure standard, use appropriate respiratory protection equipment. When using respirators, select an appropriate combination of mask and filter. Select a filter for organic gases and vapours (boiling point > 65°C). Respirators should comply with AS1716 or an equivalent approved by a state/territory authority.
Thermal hazards:	Not applicable.

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**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

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Appearance:	Colourless clear liquid
Odour:	Alcoholic
Odour threshold (ppm):	Data not available
pH:	Data not available
Melting point/freezing point (°C):	-88
Initial boiling point and boiling range (°C):	82 - 83
Flash point (°C):	12 (Abel)
Evaporation rate (Butyl acetate = 1):	Data not available
Flammability:	Highly flammable
Upper/lower flammability or explosive limits (%):	2.0 – 12.0
Vapour pressure (mmHg @ 20°C):	4.1

**Product: ISOPROPYL ALCOHOL**

Vapour density (air = 1):	2
Density (g/ml @ 15°C):	0.78 – 0.79
Solubility (kg/m <sup>3</sup> ):	Miscible with water
Partition coefficient: n-octanol/water:	Data not available
Auto-ignition temperature (°C):	425
Decomposition temperature (°C):	Data not available
Kinematic viscosity (mm <sup>2</sup> /s @ 20°C):	Data not available

**SECTION 10 STABILITY AND REACTIVITY****Reactivity**

Stable under normal conditions of use.

**Chemical stability**

Stable under normal conditions of use.

**Possibility of hazardous reactions**

Stable under normal conditions of use.

**Conditions to avoid**

Avoid heat, sparks, open flames and other ignition sources.

**Incompatible materials**

Strong oxidising agents, strong acids.

**Hazardous decomposition products**

Burning can produce carbon monoxide and/or carbon dioxide.

**SECTION 11 TOXICOLOGICAL INFORMATION**

Acute toxicity:	Expected to be of low toxicity - LD50 Oral (rat) > 2000mg/kg
Skin corrosion/irritation:	Low toxicity: LD50 Dermal (rabbit) > 2000mg/kg. Not irritating to skin. Prolonged contact may cause defatting of skin which can lead to dermatitis.
Serious eye damage/irritation:	Irritating to eyes.
Respiratory or skin sensitisation:	Not expected to be a sensitiser.
Germ cell mutagenicity:	Not expected to be mutagenic.
Carcinogenicity:	Not expected to be carcinogenic.
Reproductive toxicity:	Not expected to impair fertility.
Specific Target Organ Toxicity (STOT) – single exposure:	Low toxicity: LD50 Inhalation (rat) > 20mg/l (8 hours). Inhalation of vapours or mists may cause irritation to the respiratory system. High concentrations may cause central nervous system depression.
Specific Target Organ Toxicity (STOT) – repeated exposure:	No data available.
Aspiration hazard:	Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

**SECTION 12 ECOLOGICAL INFORMATION**

**Ecotoxicity**

Acute toxicity:

Fish –	Low toxicity: LC/EC/IC50 > 100mg/l
Aquatic invertebrate –	Low toxicity: LC/EC/IC50 > 100mg/l
Algae –	Expected to have low toxicity: LC/EC/IC50 > 100mg/l
Microorganisms –	Low toxicity: LC/EC/IC50 > 100mg/l

Chronic toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

**Persistence and degradability**

Biodegradable, oxidises rapidly by photochemical reactions in air.

**Bioaccumulative potential**

Not expected to bioaccumulate significantly.

**Mobility in soil**

Miscible with water, if product enters soil it will be highly mobile and may contaminate groundwater.

**Other adverse effects**

Data not available.

**SECTION 13 DISPOSAL CONSIDERATIONS**

Ensure waste disposal conforms to local waste disposal regulations.

**SECTION 14 TRANSPORT INFORMATION**

<b>UN number:</b>	1219
<b>Proper shipping name:</b>	Isopropanol
<b>Australian Dangerous Goods class:</b>	3
<b>Australian Dangerous Goods packing group:</b>	II
<b>Hazchem code:</b>	●2YE

**SECTION 15 REGULATORY INFORMATION**

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP), Poisons Schedule:	Not scheduled
Australian Inventory of Chemical Substances (AICS):	Listed
Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76):	16

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**SECTION 16 OTHER INFORMATION**

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Date of preparation:	18/01/2016
Changes in this revision:	Update to GHS SDS standard

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This MSDS summarises product safety information at the date of issue, to the best of our knowledge, as a general guide. Sierra cannot anticipate or control the conditions under which the product is used, so prior to usage each user must assess and control the risks associated with their use of the product. Users should also consult the relevant legislation governing the use and storage of this product. We make no warranties, express or implied, and assume no liability in connection with any use of information contained within this document. If clarification or further information is needed, the user should contact Sierra on (07) 3216 5099.

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