

SAFETY DATA SHEET



ISOPROPANOL

ORITECH PTY LTD

Part number: 701

Version No: 1.1

Issue date: 13/10/2021

Safety Data Sheet according to WHS and ADG requirements

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	ISOPROPANOL
Other names	Iso propyl alcohol ; 2 Propanol; Propan-2-ol.
Product code	701-180 701-179 701-178
Pack sizes	1 litre 5 litres 20 litres
Proper shipping name	ISOPROPANOL

Relevant identified uses of the substance or mixture and uses advised

Relevant identified uses	Solvent
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Details of the manufacturer/importer

Registered company name	Oritech Pty Ltd
Address	33 Production Drive, Alfredton, VIC, 3350, Australia
Telephone	+61 (03) 5338 3444
Fax	+61 (03) 5334 2322
Website	www.oritech.com.au
Email	info@oritech.com

Emergency telephone number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	CHEMCALL 1800 127 406
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the Model WHS Regulations and the ADG Code.

Poisons Schedule	5
GHS Classification	Eye Irritation Category 2A Specific target organ toxicity - single exposure Category 3 (narcotic effects), Flammable Liquid Category 2
	<i>Classification drawn from HCIS and ECHA C&L Inventory.</i>

Label elements

Hazard pictograms	
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SIGNAL WORD	DANGER
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Hazard statement(s)

H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness
H225	Highly flammable liquid and vapour

Precautionary statement(s) Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground/Bond container and receiving equipment.
P271	Use only outdoors or in a well-ventilated area.
P241	Use explosion-proof electrical / ventilating / lighting / intrinsically safe equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing fumes / mist / vapours.
P280	Wear protective gloves and eye protection.

Precautionary statement(s) Response

P305+P351+P338+P337+P313	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice / attention.
P304+P340+P312	IF INHALED: Remove person to fresh air and keep in a position comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P370+P378	In case of fire: Use alcohol resistant foam or normal protein foam for extinction.

Precautionary statement(s) Storage

P403+P235+P405+P233	Store locked up, in a well-ventilated place. Keep cool. Keep container tightly closed.
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Precautionary statement(s) Disposal

P501	Dispose of contents / container in accordance with local regulations.
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SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS**Substances**

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
67-63-0	100%	<u>isopropanol</u>

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

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

Eye Contact	If this product comes in contact with the eyes: Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin or hair contact occurs: Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor.
Ingestion	If swallowed do NOT induce vomiting. If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice. Avoid giving milk or oils. Avoid giving alcohol.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

Extinguishing media	Foam. Dry chemical powder. BCF (where regulations permit). Carbon dioxide. Water spray or fog - Large fires only.
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Special hazards arising from the substrate or mixture

Fire incompatibilities	Avoid strong oxidising agents i.e. nitrates, oxidising acids, pool chlorine, chlorine bleach etc. or ignition or explosion could occur.
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Advice for firefighters

Fire Fighting	Alert Fire Brigade and tell them location and nature of hazard. May be violently or explosively reactive. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water course. Consider evacuation (or protect in place). Fight fire from a safe distance, with adequate cover. If safe, switch off electrical equipment until vapour fire hazard removed. Use water delivered as a fine spray to control the fire and cool adjacent area. Avoid spraying water onto liquid pools. Do not approach containers suspected to be hot.
Fire/Explosion Hazard	Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions. Liquid and vapour are highly flammable. Severe fire hazard when exposed to heat, flame and/or oxidisers. Vapour may travel a considerable distance to source of ignition. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO), carbon dioxide (CO ₂) and other pyrolysis products typical of burning organic material
HAZCHEM	*2YE

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb small quantities with vermiculite or other absorbent material. Wipe up. Collect residues in a flammable waste container.
Major Spills	No smoking, naked lights or ignition sources Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. May be violently or explosively reactive. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. Consider evacuation (or protect in place). Increase ventilation. Stop leak if safe to do so. Absorb on sand, dirt, vermiculite or similar absorbent material. Place into labeled drums and dispose of according to local government regulations.
PPE	Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	Contains low boiling substance: Storage in sealed containers may result in pressure buildup causing violent rupture of containers not rated appropriately. Check for bulging containers. Vent periodically Always release caps or seals slowly to ensure slow dissipation of vapours DO NOT allow clothing wet with material to stay in contact with skin. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Avoid splash filling. Do NOT use compressed air for filling discharging or handling operations. Avoid all personal contact, including inhalation. Containers, even those that have been emptied, may contain explosive vapours. Do NOT cut, drill, grind, weld or perform similar operations on or near containers.
Other information	Store in original containers in approved flame-proof area. No smoking, naked lights, heat or ignition sources. DO NOT store in pits, depressions, basements or areas where vapours may be trapped. Keep containers securely sealed. Store away from incompatible materials in a cool, dry well ventilated area. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS

Conditions for safe storage, including any incompatibilities.

Suitable container	Packing as supplied by manufacturer. Check that containers are clearly labelled and free from leaks.
Storage incompatibility	Reacts violently with strong oxidisers. Is incompatible with caustics, strong acids and nitrates Dissolves rubber, many plastics, resins and some coatings Avoid oxidising agents, acids, acid chlorides, acid anhydrides, and chloroformates. Avoid strong bases.

PACKAGE MATERIAL INCOMPATIBILITIES

Not Available

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**Control parameters****OCCUPATIONAL EXPOSURE LIMITS (OEL)****INGREDIENT DATA**



Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	isopropanol	Isopropyl alcohol	983 mg/m3 / 400 ppm	1230 mg/m3 / 500 ppm	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
isopropanol	Isopropyl alcohol-	400 ppm	400 ppm	12,000 ppm

Ingredient	Original IDLH	Revised IDLH
isopropanol	12,000 ppm	2,000 [LEL] ppm

Exposure controls

Appropriate engineering controls	Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate. If ventilation is poor, then the use of a local exhaust ventilation system is recommended. Only use fans which are rated flame proof. Avoid product vapours being sucked into air conditioning system.
Personal protection	 
Eye and face protection	Safety glasses with side shields or chemical goggles if splashing is likely.
Skin protection	See Hand protection below
Hands/feet protection	Wear chemical protective gloves, Neoprene, nitrile or PE/EVAL/PE are recommended for this application...
Body protection	See Other protection below
Other protection	PVC Apron. Eyewash unit.
Thermal hazards	Not Available

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Appearance	Clear liquid		
Physical state	Liquid	Relative density (Water = 1)	0.785
Odour	Solvent odour	Viscosity (cSt)	Not Available
Odour threshold	Not Available	Auto-ignition temperature(°C)	Not Available
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available
Melting point / freezing point (°C)	-90C	Partition coefficient n-octanol / water	Not Available
Initial boiling point and boiling range (°C)	82	Surface Tension (dyn/cm or mN/m)	Not Available
Flash point (°C)	12C Closed cup	Taste	Not Available
Evaporation rate	2.50 (n-Butyl acetate=1)	Explosive properties	Not Available
Flammability	HIGHLY FLAMMABLE.	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Molecular weight (g/mol)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	60.2hPa (25°C)	Gas group	Not Available
Solubility in water (g/L)	100% solubility with water	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo. Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual. There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. The use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing. Before starting consider control of exposure by mechanical ventilation..
Ingestion	Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result.
Skin Contact	Repeated exposure may cause skin cracking, flaking or drying following normal handling and use. Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected. The material may accentuate any pre-existing dermatitis condition
Eye	There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with pain.
Chronic	Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following.

Acute toxicity	Oral LD50 (rat) 5045 – 5840 mg/kg Dermal LD50 (rabbit) 12800 mg/kg Inhalation LC50 (rat) 16000 ppm/8h
Skin corrosion/irritation	May be irritating to skin
Eye damage/irritation	Causes serious eye irritation
Respiratory/skin sensitization	Not expected to be a sensitizer
Germ cell mutagenicity	Not considered to be a mutagenic hazard
Carcinogenicity	Not considered to be a carcinogenic hazard.
Reproductive toxicity	Not considered to be toxic to reproduction
STOT (single exposure)	May cause drowsiness or dizziness
STOT (repeated exposure)	Not expected to cause toxicity to a specific organ
Aspiration toxicity	Not expected to be an aspiration hazard

SECTION 12 ECOLOGICAL INFORMATION

TOXICITY	Endpoint	Duration (Hr.)	Species	Value
isopropanol	LC50	96	Fish	9-640mg/L
	EC50	48	Crustacea	12500mg/L
	EC50	72	Algae or other aquatic plants	>1000mg/L
	EC0	24	Crustacea	5-102mg/L
	NOEC	504	Crustacea	=30mg/L

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
isopropanol	LOW (Half-life = 14 days)	LOW (Half-life = 3 days)

Bio accumulative potential

Ingredient	Bioaccumulation
isopropanol	LOW (LogKOW = 0.05)

Mobility in soil

Ingredient	Mobility
isopropanol	HIGH (KOC = 1.06)

SECTION 13 DISPOSAL CONSIDERATIONS**Waste treatment methods**

Product / packaging disposal	Recycle containers whenever possible. Product residues and containers should be disposed of in accordance with local government regulations.
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SECTION 14 TRANSPORT INFORMATION**Labels Required**

	
Marine Pollutant	NO
HAZCHEM	•2YE

Land transport (ADG)

UN number	1219				
Packing group	II				
UN proper shipping name	ISOPROPANOL (ISOPROPYL ALCOHOL)				
Environmental hazard	No relevant data				
Transport hazard class(es)	<table border="1"><tr><td>Class</td><td>3</td></tr><tr><td>Sub risk</td><td>Not Applicable</td></tr></table>	Class	3	Sub risk	Not Applicable
Class	3				
Sub risk	Not Applicable				
Special precautions for user	<table border="1"><tr><td>Special provisions</td><td>274</td></tr><tr><td>Limited quantity</td><td>1 L</td></tr></table>	Special provisions	274	Limited quantity	1 L
Special provisions	274				
Limited quantity	1 L				

SECTION 15 REGULATORY INFORMATION**Safety, health and environmental regulations / legislation specific for the substance or mixture****ISOPROPANOL IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australian Inventory of Industrial Chemicals (AIIC)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

SECTION 16 OTHER INFORMATION**Revision Schedule**

Revision Date	Not applicable
Initial Date	13/10/2021

SDS Version Summary

Version	Issue Date	Sections Updated
1.1	13/10/2021	All sections originated

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources such as the ECHA C&L Chemical Inventory, HSNO (CCID) New Zealand, AICIS and HCIS Australia

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Definitions and abbreviations

PC-TWA;	Permissible Concentration-Time Weighted Average
PC-STEL;	Permissible Concentration-Short Term Exposure Limit
IARC;	International Agency for Research on Cancer
ACGIH;	American Conference of Government Industrial Hygienists
STEL;	Short Term Exposure Limit
TEEL;	Temporary Emergency Exposure Limit
IDLH;	Immediate Danger to Life or Health Concentrations
OSF;	Odour Safety Factor
NOAEL;	No Observed Effects Level
TLV;	Threshold Limit Value
LOD;	Limit Of Detection
OTV;	Odour Threshold Value
BCF;	Bio Concentration Factors
BEI;	Biological Exposure Index

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End of SDS