

# SAFETY DATA SHEET



## 70% Isopropyl Alcohol

### 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: IPA 70% Isopropyl Alcohol

OTHER NAMES: Isopropanol, 2-Propanol  
RECOMMENDED USE: Cleaning and Sanitising Solvent

SUPPLIER NAME: 2CARE PRODUCTS  
ADDRESS: 9 Donnor Place  
Mt Wellington  
AUCKLAND

Phone: 0800 753 753  
Fax: (09) 574 5999

Emergency Telephone: 0800 764 766 NEW ZEALAND NATIONAL POISON CENTRE

### 2. HAZARD(S) IDENTIFICATION

#### GLOBALLY HARMONISED SYSTEM

HAZARD CLASSIFICATION HAZARDOUS according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS).

HAZARD CATEGORIES	Flammable Liquids	Category 2
	Acute Toxicity (Oral)	Category 5
	Skin Corrosion/Irritation	Category 3
	Serious Eye Damage/Irritation	Category 2B

PICTOGRAMS



SIGNAL WORD **DANGER**

HAZARD STATEMENTS  
H225 – Highly flammable liquid and vapour.  
H303 – May be harmful if swallowed.  
H316 – Causes mild skin irritation.  
H320 – Causes eye irritation.

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## PRECAUTIONARY STATEMENTS

### PREVENTION

P102 – Keep out of reach of children.  
P103 – Read label before use.  
P104 – Read Safety Data Sheet before use.  
P210 – Keep away from heat. No smoking.  
P233 – Keep container tightly closed  
P240 – Ground/bond container and receiving equipment.  
P241 – Use explosion proof electrical equipment.  
P242 – Use only non-sparking tools.  
P243 – Take precautionary measures against static discharge.  
P264 – Wash hands thoroughly after handling.  
P280 – Wear protective gloves, clothing and eye/face protection.

### RESPONSE

P101 – If medical advice is needed, have product container or label at hand.  
P312 – Call NZ POISON CENTRE or doctor/physician if you feel unwell.  
P331 – Do NOT induce vomiting.  
P303 + P361 + P353 – **IF ON SKIN (or hair):** Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P305 + P351 + P338 – **IF IN EYES:** Rinse cautiously for several minutes. **REMOVE** contact lenses if present and safe to do so. Continue rinsing.  
P332 + P313 – If skin irritation occurs: Get medical advice/attention.  
P337 + P313 – If eye irritation persists: Get medical advice/attention.  
P370 + P378 – In case of fire: Use water fog (or if unavailable fine water spray), Foam, Dry agent (Carbon Dioxide), Sand, Dolomite.

### STORAGE

P403 + P235 – Store in a well-ventilated place. Keep cool.

### DISPOSAL

P501 - Do not let this product enter the environment. Do not dispose of in waterways or sewers. Dispose of this material and its container as hazardous waste, via a licensed facility. See local council for disposal/recycling information.

## ENVIRONMENTAL PROTECTION AUTHORITY (NEW ZEALAND)

### HSNO CLASSIFICATIONS

#### Toxicity Hazards

3.1B Flammable liquid - high hazard.  
6.1E Substances that are acutely toxic –May be harmful, Ingestion hazard.  
6.3B Substances that are mildly irritating to the skin.  
6.4A Substances that are irritating to the eye.

The information contained in this SDS is specific to the product when handled and used neat. This product when diluted may not require the same control measures as the neat product. Check with your technical representative if in doubt.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Isopropyl Alcohol	C <sub>3</sub> H <sub>8</sub> O	67-63-0	70%

## 4. FIRST AID MEASURES

### INGESTION

**RINSE** mouth with water. Give plenty of water to drink. **DO NOT** induce vomiting. Seek immediate medical assistance.

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EYE CONTACT	<b>IRRIGATE</b> with copious quantities of water for at least 20 minutes. In all cases of eye contamination, it is a sensible precaution to seek medical advice.
SKIN CONTACT	<b>WASH</b> contaminated skin with plenty of water. Remove contaminated clothing and wash before re-use. If irritation occurs seek medical advice.
INHALATION	<b>REMOVE</b> victim from exposure – avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek immediate medical advice.
SAFETY MEASURES	Potable water should be available to rinse eyes. Provide eye baths and safety showers. Treat symptomatically.
PHYSICIAN NOTES	Treat symptomatically based on judgement of doctor and individual reactions of patient.

## 5. FIRE FIGHTING METHODS

GENERAL MEASURES	Severe Fire Hazard when exposed to Oxidisers. May form flammable vapour mixtures with air. Avoid all ignition sources. Can be considered a severe explosive hazard when exposed to heat, flame and/or oxidisers. Intrinsically safe equipment necessary in area where chemical is being used. Nearby equipment must be earthed. Vapour may travel considerable distance to source of ignition and flash back.
FLAMMABILITY CONDITIONS	Highly flammable liquid.
EXTINGUISHING MEDIA	Dry agent (Carbon Dioxide), Sand, Dolomite. DO NOT extinguish fire unless flow can be stopped first.
HAZARDOUS PRODUCTS OF COMBUSTION	On burning will emit toxic fumes of carbon monoxide. The packaging material may also burn to emit noxious fumes.
SPECIAL FIRE FIGHTING INSTRUCTIONS	Keep upwind. Consider evacuation. Shut off all possible sources of ignition. If safe to do so, remove containers from path of fire. Keep containers cool with water spray. Heating can cause expansion or decomposition leading to a violent rupture of containers.
PERSONAL PROTECTIVE EQUIPMENT	Wear self-contained, breathing apparatus, if risk of exposure to vapour or products of combustion. And protective gloves and boots.
HAZCHEM CODE	2YE.

## 6. SPILLAGE/ACCIDENTAL RELEASE MEASURES

GENERAL RESPONSE PROCEDURE	Shut off all possible sources of ignition. Clear area of all unprotected personnel. Wear protective equipment to prevent skin and eye contamination and inhalation of vapours. Contain DO NOT allow chemical to enter confined spaces such as sewers due to explosion risk.
CLEAN UP PROCEDURES	Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin & eyes. Small spills can be removed by use of a small spills kit. Or use absorbent soil, sand or other inert material to absorb the spill.
CONTAINMENT	Contain spill with sand, earth or vermiculite. Collect this material and seal in properly labelled containers for disposal.
DECONTAMINATION	Wash area down with water and collect washings for disposal.

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## ENVIRONMENTAL PRECAUTIONARY MEASURES

Prevent run off into drains and waterways. If contamination of sewers or waterways has occurred advise the Environmental Protection Authority and/or your local Waste Authority.

## EVACUATION CRITERIA

Evacuate all non-essential personnel.

## PERSONAL PRECAUTIONARY MEASURES

Personnel involved in the clean-up should wear full protective clothing as listed in section 8.

## 7. HANDLING AND STORAGE

### HANDLING

Keep away from sources of ignition. Avoid spilling on skin and eye contact. Ventilate, well. Avoid breathing vapours. Use approved respirator if air contamination is above acceptable level. It is advisable not to use contact lens unless using tight fitting goggles or full-face respirator is worn. Wear protective clothing when risk of exposure occurs. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. Vapour may ignite on pumping or pouring due to static electricity, earth and secure metal containers when dispensing or pouring product. Use spark-free tools when handling.

### STORAGE

Store in well-ventilated area and away from sources of ignition and heat. Store in cool, dry place and out of direct sunlight. Store away from oxidising agents, alkali metals, acids, acid chlorides, ammonia. In case of flexible tubing usage, check with manufacturer to find product compatibility. Ground the container and transfer equipment to eliminate static electric sparks. Keep container closed at all times. Check regularly for leaks.

### CONTAINER

Aluminium is not a suitable container for storage. Store in original packaging as approved by manufacturer.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### GENERAL

No information available.

### EXPOSURE LIMITS

No information available.

### BIOLOGICAL LIMITS

No information available on biological limit values for this product.

### ENGINEERING MEASURES

General mechanical ventilation is considered satisfactory in enclosed spaces. DO NOT enter confined spaces where vapour may have collected. Keep containers closed when not in use. Earth all containers to reduce the possibility of sparks from static electricity. Flameproof equipment to be used with this product. Refer SAA HB 13/NEEITC 1992 Electrical Equipment for Hazardous Areas.

### PERSONAL PROTECTIVE EQUIPMENT

#### RESPIRATOR

If determined an inhalation risk is present. Use a Half mask respirator with a cartridge certified for use with organic vapours and conforms to the requirements of AS1715/1716).

#### EYES

Use splash proof safety goggles, and/or if necessary an appropriate full-face shield that conform to AS1336/1337.

#### HANDS

Any Gloves approved for chemical hazards that conform to AS2161.

#### CLOTHING

Trousers, Long sleeved shirt and closed shoes.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES:

PHYSICAL STATE	Liquid
APPEARANCE	Free flowing
COLOUR	Clear
ODOUR	Characteristic
pH	No Data Available.
SPECIFIC GRAVITY	0.78g/mL @ 25°C.
VAPOUR PRESSURE	4.4kPa @ 20°C.
VAPOUR DENSITY	No Data Available
BOILING POINT	82°C.
MELTING POINT	No Data Available
FREEZING POINT	No Data Available
FLASH POINT	12°C
AUTO IGNITION TEMPERATURE	399°C
EVAPORATION RATE	2.4 (n-Butyl Acetate = 1)
FLAMMABLE LIMITS	Lowest Flammable Level (LFL) 1.8% v/v - Upper Flammable Level (UFL) 12.0% v/v
SOLUBILITY	Miscible with water, methanol, ether, chloroform & acetone.

## 10. STABILITY AND REACTIVITY

GENERAL INFORMATION	Stable under normal conditions.
CHEMICAL STABILITY	Unstable in the presence of incompatible materials may liberate poisonous fumes.
CONDITIONS TO AVOID	Do not combine part drums of the same product. Use in a well-ventilated area.
MATERIALS TO AVOID	Avoid contact with oxidising agents, alkali metals, acids, acid chlorides, ammonia and potassium tert-butoxide.
HAZARDOUS DECOMPOSITION PRODUCTS	On burning will emit toxic fumes including those of carbon monoxide. The packaging material may also burn to emit noxious fumes.

## 11. TOXICOLOGICAL INFORMATION

ORAL	LD <sub>50</sub> – 3600mg/kg (Mouse) Although ingestion is not thought to produce harmful effects (as classified under EC Directives), the material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health).
DERMAL	The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting

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INHALATION	The material is not thought to produce respiratory irritation (as classified by EC Directives using animal models). Nevertheless inhalation, of the material, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress.
EYE	Evidence exists, or practical experience predicts, that the material may cause eye irritation in a substantial number of individuals and/or may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals. Repeated or prolonged eye contact may cause inflammation characterised by temporary redness (similar to windburn) of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye damage/ulceration may occur. Isopropanol vapour may cause mild eye irritation at 400 ppm. Splashes may cause severe eye irritation, possible corneal burns and eye damage.
CARCINOGENICITY	No information available.
MUTAGENICITY	No information available.
REPRODUCTIVE	No information available.
TARGET ORGAN	No information available.
LONG TERM	No information available.

## 12. ECOLOGICAL INFORMATION

ECOTOXICITY	No information available.
PERSISTENCE / DEGRADABILITY	Substantially biodegradable.
MOBILITY	No information available.
ENVIRONMENTAL FATE	Do not allow drainage into sewer, streams or storm water systems.
BIOACCUMULATION POTENTIAL	Low potential for bioaccumulation.
ENVIRONMENTAL IMPACT	No information available.

## 13. DISPOSAL CONSIDERATIONS

GENERAL INFORMATION	Can be disposed of in a sewage treatment facility provided it is first diluted with sufficient water to bring the mixture below the flammable threshold (less than 2% IPA by volume) i.e. to raise the flash point to above 98°C. This requirement is included to ensure that flammable substances do not collect in pockets of sewage collection system with resultant fires or vapour explosions. Large volumes may be suitable for re-distillation by solvent contractors.
SPECIAL PRECAUTIONS FOR LANDFILL	Empty containers may contain hazardous residues. Labels should not be removed from containers until they have been appropriately cleaned. Do not cut, puncture or weld on or near to the containers. Containers should be cleaned by approved methods and then re-used or disposed of by landfill. After cleaning, all existing labels should be removed. Do not incinerate closed containers.

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## 14. TRANSPORT INFORMATION

### LAND TRANSPORT NEW ZEALAND (NZS5433)

Classified as a Dangerous Good by NZS5433:2012 for transport by Road and Rail

PROPER SHIPPING NAME	ISOPROPANOL or ISOPROPYL ALCOHOL
UN NUMBER	1219
CLASS	3 – Flammable Liquid
SUBSIDIARY RISK	No Data Available
PACKAGING GROUP	II
HAZCHEM	2YE
SPECIAL PROVISIONS	Not to be loaded with explosives (Class 1), flammable gases (Class 2.1). If both are in bulk, toxic gases (Class 2.3), spontaneously combustible substances (Class 4.2), oxidising agents (Class 5.1), organic peroxides (Class 5.2) or radioactive substances (Class 7), however exemptions may apply. Isopropyl Alcohol is classified as Dangerous Goods and must comply with the Land Transport Rule: Dangerous Goods 2005, and NZS5433:2012 Transport of Dangerous Goods on Land.

### SEA TRANSPORT (IMDG)

Classified as a Dangerous Good by the International Maritime Dangerous Good Code (IMDG) for transport by sea

PROPER SHIPPING NAME	ISOPROPANOL or ISOPROPYL ALCOHOL
UN NUMBER	1219
CLASS	3 – Flammable Liquid
SUBSIDIARY RISK	No Data Available
PACKAGING GROUP	II
HAZCHEM	2YE
EMS	FE, SD
MARINE POLLUTANT	Not Listed
SPECIAL PROVISIONS	No Data Available

### AIR TRANSPORT (IATA)

Classified as a Dangerous Good by the international Air Transport Association (IATA) for transport by air

PROPER SHIPPING NAME	ISOPROPANOL or ISOPROPYL ALCOHOL
UN NUMBER	1219
CLASS	3 – Flammable Liquid
SUBSIDIARY RISK	No Data Available
PACKAGING GROUP	II
HAZCHEM	2YE
SPECIAL PROVISIONS	No Data Available

## 15. REGULATORY INFORMATION

### ENVIRONMENTAL PROTECTION AUTHORITY (NEW ZEALAND)

Hazardous Substances & New Organisms Act 1996

APPROVAL CODE	HSR001180
HSNO CLASSIFICATIONS	3.1B, 6.1E(Oral), 6.3B, 6.4A
APPROVED HANDLER	Required
NZIOC	Listed

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## 16. OTHER INFORMATION

REVISION NUMBER 1 – New Issue

ISSUE DATE 7<sup>th</sup> November 2017

In any event the review and if necessary re-issue of an SDS shall be no longer than 5 years after the last date of issue

KEY/LEGEND	AS1336/1337	Industrial Eye Protection – Metric Units (Standards Australia).
	AS1715/1716	Respiratory Protection Devices – Metric Units (Standards Australia).
	AS2161	Industrial Safety Gloves and Mittens (Standards Australia).
	CAS	Chemical Abstracts Service.
	EC <sub>50</sub>	Concentration which induces a response halfway between the baseline and maximum.
	EMS	IMDG Emergency Schedule.
	EPG	Emergency Procedures Guide.
	GHS	Globally Harmonised System.
	HSNO	Hazardous Substances and New Organisms.
	IMDG	International Maritime Dangerous Goods.
	LC <sub>50</sub>	Concentration required to kill half the members of a tested population after a specified duration.
	LD <sub>50</sub>	Dosage required to kill half the members of a tested population after a specified duration.
	NOEC	No Observed Effect Concentration
	NZIOC	New Zealand Inventory of Chemicals
	SDS	Safety Data Sheet
	UN No.	UN Nations Number
	WES-Ceiling	Concentration that should not be exceeded at any time during any part of the working day

REFERENCES

ACGIH - American Conference of Governmental Industrial Hygienists  
Workplace Exposure Standards-and Biological Exposure Indices – WorkSafe New Zealand  
TOXNET – ChemIDPlus Database  
IMDG Appendix B List of Marine Pollutants  
IMDG Emergency Fire and Spill Codes  
UN Recommendations on the Transport of Dangerous Goods Volume 1 (17<sup>th</sup> Edition) Part 3

This SDS has been prepared from current technical data and summarises at the date of issue our best knowledge of the health and safety information of the product, and how to safely handle and use the product in the work place. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact the company.

Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.

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