

## SAFETY DATA SHEET

### SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

- **Product (material) name:** Methylated Spirits (ethyl alcohol)
- **Other names:** Ethanol, alcohol
- **Recommended use:**
- **Supplier:** Clearchoice Products Ltd Ptd 1 Hilton Avenue , NSW , 2044
- **Tel:** 02 9557 0111    **Fax:** 02 9557 0112
- **Emergency:** Contact Poisons Info Centre 131 126 or Manufacturer

### SECTION 2: HAZARDS IDENTIFICATION

- **Classification of the substance or mixture:**  
Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)  
Hazard Categories:    **Flammable Liquids - Category 2**  
                                  **Serious Eye Damage/Irritation - Category 2A**

- **Pictograms**



- **Signal word:** Danger
- **Hazard statement(s):**  
**H225:** Highly flammable liquid and vapour.  
**H319:** Causes serious eye irritation
- **Precautionary statement(s):**

Preventio	<b>P233</b>	Keep container tightly closed.
	<b>P240</b>	Ground/bond container and receiving equipment.
	<b>P242</b>	Use only non-sparking tools.
	<b>P243</b>	Take precautionary measures against static discharge.
	<b>P210</b>	Keep away from all sources of ignition. No smoking.
	<b>P264</b>	Wash face, hands and any exposed skin thoroughly after
	<b>P280</b>	Wear protective gloves/protective clothing/eye
	<b>P241</b>	Use explosion-proof electrical/ventilating/lighting/equipment.
Response	<b>P303 + P361 + P353</b>	IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
	<b>P305 + P351 + P338</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue
	<b>P337 + P313</b>	If eye irritation persists: Get medical advice/attention.
	<b>P370 + P378</b>	In case of fire: Alcohol resistant foam is the preferred fire-fighting medium. However, if it is not available, fine water spray or water fog can be used to extinguish
Storage	<b>P403 + P235</b>	Store in a well-ventilated place. Keep cool.
Disposal	<b>P501</b>	Dispose of contents/container in accordance with local / regional / national / international regulations.

**SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS****MIXTURE:**

Chemical name	CAS No.	% product
Ethanol	64-17-5	<99.70 %
Methyl Isobutyl Ketone (MIBK)	108-10-1	0.25 %
Water	7732-18-5	Balance %

This is a commercial product and the exact ratio of ingredients may vary slightly and trace quantities of impurities are also possible.

**SECTION 4: FIRST AID MEASURES**

<b>Swallowed</b>	Rinse mouth with water. Give water to drink provided victim is conscious. Do not induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position if possible) to maintain open airway and prevent aspiration. Seek medical attention.
<b>Eye</b>	Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Take care not to rinse contaminated water into the non-affected eye. Seek immediate medical attention.
<b>Skin</b>	Immediately remove all contaminated clothing, including footwear after wetting with water if available. Wash affected areas thoroughly with water. If irritation occurs, seek medical advice.
<b>Inhaled</b>	Remove victim from exposure to fresh air. Allow patient to assume most comfortable position and keep warm and at rest. If patient finds breathing difficult, and develops a bluish discoloration of the skin, ensure airways are clear, and have qualified person give oxygen through a face mask. Seek immediate medical advice. BURNS: Immerse affected area in cold water for 10-15 minutes. Bandage lightly with sterile dressing. Treat for shock if required. Transport to hospital if required.
<b>Advice to Doctor</b>	Treat symptomatically based on individual reactions of patient and judgement of doctor.

**SECTION 5: FIRE FIGHTING MEASURES**

<b>General Measures</b>	Flame-proof equipment is necessary in all areas where this chemical is being used. Nearby equipment must be earthed. Remain upwind and notify those downwind of hazard.
<b>Flammability Conditions</b>	Highly flammable. Vapours may form explosive mixtures with air.
<b>Extinguishing Media</b>	In case of fire, appropriate extinguishing media include water fog or foam. Keep containers cool with water spray. If safe to do so, remove containers from path of fire. Earth containers when dispensing fluids.
<b>Fire and Explosion Hazard</b>	Highly flammable- explosive vapour. May ignite from sources including cigarettes, open flames, spark producing switches / tools, heaters, naked lights, pilot lights, mobile phones etc
<b>Hazardous Products of Combustion</b>	May evolve toxic gases (carbon oxides, hydrocarbons) when heated to decomposition.
<b>Special Fire Fighting Instructions</b>	Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk. Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.
<b>Personal Protective Equipment</b>	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) or chemical splash suit. Please note: Structural fire fighters uniform will provide limited protection.

<b>Flash Point</b>	13 - 18 °C Closed Cup
<b>Lower Explosion Limit</b>	3.3 %
<b>Upper Explosion Limit</b>	19.0 %
<b>Auto Ignition Temperature</b>	No Data Available
<b>Hazchem Code</b>	YE

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**General Response Procedure** Shut off all possible sources of ignition. Use clean, non-sparking tools and equipment. Avoid accidents, clean up immediately. Increase ventilation.

**Clean Up Procedures** Absorb spill with sand or similar, collect and place in sealable containers for disposal according to local authority guidelines.

**Containment** Stop leak if safe to do so.

**Environmental Precautionary Measures:** Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management.

**Evacuation Criteria:** Evacuate all unnecessary personnel.

**Personal Precautionary Measures:** Personnel involved in the clean up should wear full protective clothing as listed in section 8.

**SECTION 7: HANDLING AND STORAGE**

**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. Avoid prolonged or repeated exposure. Operations should be carried out in an efficient fume hood or equivalent system. Remove contaminated clothing and wash before reuse. Discard contaminated shoes. Keep away from combustible material. Empty containers pose a fire risk, evaporate residue under a fume hood. Chemicals should be used only by those trained in handling potentially hazardous materials.

**Storage** 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 as listed in section 10. Store away from direct sunlight and other sources of heat. This product has a UN Classification of 1170 and a Dangerous Goods Class 3 (flammable) according to The Australian Code for the Transport of Dangerous Goods By Road and Rail

**Container** Container type/packaging must comply with all applicable local legislation. Store in original packaging as approved by manufacturer.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****General**

The following exposure standard has been established by The Australian Safety and Compensation Council (ASCC); Ethyl Alcohol (ethanol) CAS: 64-17-5  
TWA = 1000ppm (1880mg/m<sup>3</sup>)

Methyl isobutyl ketone CAS: 108-10-1 TWA = 50 ppm (205mg/m<sup>3</sup>)

STEL = 75 ppm (307mg/m<sup>3</sup>)

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.

**Exposure Limits**

No Data Available

**Biological Limits**

No information available on biological limits for this product.

**Engineering Measures**

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. In poorly ventilated areas, mechanical explosion proof extraction ventilation is recommended. Flammable / explosive vapours may accumulate in poorly ventilated areas. Vapours are heavier than air and may travel some distance to an ignition source and flash back. Maintain vapour levels below the recommended exposure standard.

**Personal Protection Equipment**

RESPIRATOR: Where an inhalation risk exists, wear a type A (Organic vapour) Respirator, At high levels wear Self Contained Breathing apparatus (SCBA) or an Air-line respirator (AS1715/1716).

EYES: Wear splash proof goggles (AS1336/1337).

HANDS: Nitrile or neoprene gloves are recommended (AS2161).

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

RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn, ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

**Work Hygienic Practices** No Data Available

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Physical State	Liquid
Appearance	Liquid, Free of any foreign matter
Odour	No Data Available
Colour	Clear
pH	No Data Available
Vapour Pressure	5.9 kPa (@ 0 °C)
Relative Vapour Density	No Data Available
Boiling Point	78 °C
Melting Point	No Data Available
Freezing Point	No Data Available
Solubility	Completely soluble
Specific Gravity	0.79 g/ml - 0.80 g/ml
Flash Point	13 - 18 °C Closed Cup
Auto Ignition Temp	No Data Available
Evaporation Rate	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available Decomposition Temperature
Specific Heat	No Data Available
Molecular Weight	No Data Available
Net Propellant Weight	No Data Available Octanol Water Coefficient
Partition Coefficient	No Data Available Saturated Vapour Concentration No Data Available Vapour Temperature
Viscosity	No Data Available
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	Methyl Isobutyl Ketone (MIBK)
Potential for Dust Explosion	Product is a flammable liquid.
Fast or Intensely Burning Characteristics	No data
Flame Propagation or Burning Rate of Solid Materials	No data
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No data
Properties That May Initiate or Contribute to Fire Intensity	No data

**SECTION 10: STABILITY AND REACTIVITY**

<b>General Information</b>	Flammable liquid with explosive vapour.
<b>Chemical Stability</b>	Product is stable under normal conditions of use, storage and temperature.
<b>Conditions to Avoid</b>	Avoid excessive heat, direct sunlight, static discharges, moisture and high temperatures.
<b>Materials to Avoid</b>	Oxidising agents (eg. Hypochlorites, peroxides), acids (sulphuric acid), strong alkalis (eg. Hydroxides), heat and ignitions sources.
<b>Hazardous Decomposition Products</b>	May evolve toxic gases (carbon oxides, hydrocarbons) when heated to decomposition.
<b>Hazardous Polymerisation</b>	No Data Available

**SECTION 11: TOXICOLOGICAL INFORMATION**

<b>General Information</b>	Low to moderate toxicity - irritant. This product has the potential to cause adverse health effects with chronic over exposure. Use safe work practices to avoid eye or skin contact and over exposure via inhalation.  Ethanol: Inhalation LC50 Rat: 2000 ppm/10h Ingestion LD50 Mouse: 3450 mg/kg  MIBK: Inhalation LC50 (Inhalation): 23300 mg/m3 (rat) Skin LD50 Rabbit: >20 mL/kg Ingestion LD50 Guinea Pig: 1600 mg/kg
<b>SkinIrritant</b>	Skin irritant. Prolonged contact may result in drying and defatting of the skin, rash and dermatitis. Toxic effects may result from skin absorption.
<b>Eyelrritant</b>	Irritating to eyes. Exposure may result in lacrimation, irritation, pain and redness.
<b>Ingestion</b>	Chronic ingestion may result in cirrhosis of the liver. Over exposure may cause central nervous system depression. Low toxicity. Ingestion may result in gastrointestinal irritation, nausea, vomiting, abdominal pain, diarrhoea, headache, dizziness and drowsiness with large doses. Liver damage may occur with high level of chronic ingestion.
<b>Inhalation</b>	Inhalation may cause irritation to the respiratory system, nose and throat irritation, coughing and headache. Over exposure may result in nausea, dizziness and drowsiness.

**SECTION 12: ECOLOGICAL INFORMATION**

<b>Ecotoxicity</b>	Golden ide LC0: >1000 mg/L/48h Daphnia Magna EC50: >1000 mg/L/24h
<b>Mobility</b>	If spilled on soild, ethanol will either evaporate or leach into the ground due to the relatively high vapour pressure and low absorption in soil.
<b>Persistence/Degradability</b>	This product will biodegrade, probably to acetic acid and formaldehyde. Ethanol will volatise from water and biodegrade, and is not expected to bioconcentrate. It will photodegrade in air with a half-life ranging from hours (polluted air) to days (clean air).
<b>Bioaccumulation Potential</b>	No information available on bioaccumulation for this product.
<b>Environmental Impact</b>	No data

**SECTION 13: DISPOSAL CONSIDERATIONS**

<b>General Information</b>	Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State and Federal Regulations or recycled/reconditioned at an approved facility. For small amounts absorb with sand, vermiculite or similar and dispose of to an approved landfill site. Contact the manufacturer for additional information if larger amounts are involved.
<b>Precautions for landfill</b>	Contact a specialist disposal company or the local waste regulator for advice. This material may be suitable for approved landfill.

**SECTION 14: TRANSPORT INFORMATION**

<b>Sea Transport</b>	IMDG
<b>Proper Shipping Name</b>	ETHANOL (ETHYL ALCOHOL)
<b>Class</b>	3 Flammable Liquids
<b>Subsidiary Risk(s)</b>	No Data Available
<b>UN Number</b>	1170
<b>Hazchem</b>	2YE
<b>Pack Group</b>	II
<b>Special Provision</b>	No Data Available
<b>EMS</b>	FE,SD
<b>Marine Pollutant</b>	No
<b>Air Transport</b>	IATA

**National Transport Commission (Australia)**

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

**Dangerous Goods Classification** Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

**SECTION 15 REGULATORY INFORMATION**

The chemicals in formulation are listed on the Australian Inventory of Chemical Substances (AICS).  
The chemical is listed in schedule 5 of the SUSMP.

**SECTION 16 OTHER INFORMATION**

**Date of preparation or last revision of the MSDS** December 2020

**Acryoyms:**

<b>ADG Code</b>	Australian Code for the Transport of Dangerous Goods by Road and Rail (7 <sup>th</sup> edition)
<b>AICS</b>	Australian Inventory of Chemical Substances
<b>ASCC</b>	Office of the Australian Safety and Compensation Council
<b>CAS number</b>	Chemical Abstracts Service Registry Number
<b>Hazchem Code</b>	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
<b>IARC</b>	International Agency for Research on Cancer
<b>NOS</b>	Not otherwise specified
<b>NTP</b>	National Toxicology Program (USA)
<b>SUSMP</b>	Standard for the Uniform Scheduling of Medicines & Poisons
<b>UN Number</b>	United Nations Number

**Disclaimer:**

A) This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. The information is meant to describe Safety Requirements of the product and should not be construed as guaranteeing specific properties. This MSDS is analogous to the data for the principal components of the mixture/compound. No warranty, express or implied, is made as to its accuracy, reliability or completeness.

B) Each user should read this MSDS, all product labels, and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

C) We can not accept any liability for any damage or injury caused by the product as it is sold and its use, handling and storage are completely out of our control.