



SAFETY DATA SHEET

Ethanol

According to Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice, December 2011

SECTION 1: Identification: Product identifier and chemical identity

Product identifier

Product name Ethanol

Internal identification ETHANOL

Relevant identified uses of the substance or mixture and uses advised against

Application Water miscible solvent

Uses advised against No specific uses advised against are identified.

Details of the supplier of the safety data sheet

Supplier Sampson Chemical Products
42 Redcliffe Gardens Drive
Clontarf, QLD, 4019
+61 7 3283 4511
sampson_office@bigpond.com

Contact Person Poisons Information 131126 or Brennan Stark 0428 835 855

Manufacturer Eco Pro Australia Pty Ltd
42 Redcliffe Gardens Drive, Clontarf, QLD, 4019
+61 7 3283 4511
sampson_office@bigpond.com

Emergency telephone number

Emergency telephone Poisons Information 131126 or Brennan Stark 0428 835 855

SECTION 2: Hazard(s) identification

Classification of the substance or mixture

Physical hazards Flam. Liq. 2 - H225

Health hazards Not Classified

Environmental hazards Not Classified

Label elements

Pictogram



Signal word Danger

Hazard statements H225 Highly flammable liquid and vapour.

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Precautionary statements	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 equipment.
	P242 Use only non-sparking tools.
	P243 Take precautionary measures against static discharge.
	P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
	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 foam, carbon dioxide, dry powder or water fog for extinction.
	P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/ container in accordance with national regulations.	

Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition and information on ingredients

Mixtures

Ethanol CAS number: 64-17-5	60-100%
Classification Flam. Liq. 2 - H225	
2-methylpropan-2-ol CAS number: 75-65-0	<1%
Classification Flam. Liq. 2 - H225 Acute Tox. 4 - H332 Eye Irrit. 2A - H319 STOT SE 3 - H335	

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

Description of first aid measures

General information	If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if symptoms are severe or persist.
Ingestion	Rinse mouth thoroughly with water. Get medical advice/attention if you feel unwell. Do not induce vomiting unless under the direction of medical personnel.
Skin Contact	Rinse with water.
Eye contact	Rinse with water. Get medical attention if any discomfort continues.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.
New category	

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Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	No specific symptoms known.
Ingestion	No specific symptoms known.
Skin contact	No specific symptoms known.
Eye contact	No specific symptoms known. May be slightly irritating to eyes.

Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
Specific treatments	No special treatment required.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media	The product is flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture

Specific hazards	Containers can burst violently or explode when heated, due to excessive pressure build-up. Flammable liquid and vapour. Vapours may be ignited by a spark, a hot surface or an ember. Vapours may form explosive mixtures with air. Fire-water run-off in sewers may create fire or explosion hazard.
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

Advice for firefighters

Protective actions during firefighting	Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to Australia/New Zealand Standards AS/NZS 4967 (for clothing) AS/NZS 1801 (for helmets), AS/NZS 4821 (for protective boots), AS/NZS 1801 (for protective gloves) will provide a basic level of protection for chemical incidents.

Hazchem Code	•2YE
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SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Evacuate area. Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Promptly remove any clothing that becomes contaminated.
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Environmental precautions

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Environmental precautions Avoid discharge into drains or watercourses or onto the ground.

Methods and material for containment and cleaning up

Methods for cleaning up Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Eliminate all ignition sources if safe to do so. No smoking, sparks, flames or other sources of ignition near spillage. Do not allow material to enter confined spaces, due to the risk of explosion. Absorb small quantities with paper towels and evaporate in a safe place. Once evaporation is complete, place paper in a suitable waste disposal container and seal securely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. For waste disposal, see Section 13.

Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage, including how the chemical may be safely used

Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists. The product is flammable. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

Advice on general occupational hygiene Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from oxidising materials, heat and flames. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage.

Storage class Flammable liquid storage.

Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls and personal protection

Control parameters

Occupational exposure limits

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Long-term exposure limit (8-hour TWA): 1000 ppm 1880 mg/m³

2-methylpropan-2-ol

Long-term exposure limit (8-hour TWA): 100 ppm 303 mg/m³

Short-term exposure limit (15-minute): 150 ppm 455 mg/m³

Exposure controls

Protective equipment



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Appropriate engineering controls	Provide adequate ventilation. Observe any occupational exposure limits for the product or ingredients.
Eye/face protection	Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.
Hand protection	No specific hand protection recommended.
Other skin and body protection	Wear appropriate clothing to prevent repeated or prolonged skin contact.
Hygiene measures	Wash hands thoroughly after handling. Wash at the end of each work shift and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.
Respiratory protection	Ensure all respiratory protective equipment is suitable for its intended use and complies with Australia/New Zealand Standard AS/NZS 1716. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with Australia/New Zealand Standard AS/NZS 1716. Full face mask respirators with replaceable filter cartridges should comply with Australia/New Zealand Standard AS/NZS 1716. Half mask and quarter mask respirators with replaceable filter cartridges should comply with Australia/New Zealand Standard AS/NZS 1716.
Environmental exposure controls	Keep container tightly sealed when not in use.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Clear.
Odour	Alcoholic.
Specific Gravity	0.79
Initial boiling point and range	78.3°C @ 101 kPa
Flash point	13°C CC (Closed cup).
Flammability Limit - Lower(%)	3.5%
Vapour pressure	58.1 mbar @ 20°C
Solubility Value (g/100g H₂O 20°C)	Miscible with water.
Volatile By Vol. (%)	100%

SECTION 10: Stability and reactivity

Reactivity	There are no known reactivity hazards associated with this product.
Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
Possibility of hazardous reactions	The following materials may react strongly with the product: Oxidising agents.
Conditions to avoid	Avoid heat, flames and other sources of ignition. Containers can burst violently or explode when heated, due to excessive pressure build-up. Static electricity and formation of sparks must be prevented.

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Materials to avoid	Oxidising materials. Acids - oxidising.
Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

SECTION 11: Toxicological information

Information on toxicological effects

Toxicological effects Not regarded as a health hazard under current legislation.

Acute toxicity - oral

Notes (oral LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

IARC carcinogenicity

Contains a substance/a group of substances which may cause cancer. IARC Group 1
Carcinogenic to humans.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity - development

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

General information

The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

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Inhalation	No specific symptoms known.
Ingestion	No specific symptoms known.
Skin Contact	No specific symptoms known.
Eye contact	No specific symptoms known.
Route of entry	Ingestion Inhalation Skin and/or eye contact
Target Organs	No specific target organs known.

SECTION 12: Ecological Information

Ecotoxicity	Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.
Toxicity	Based on available data the classification criteria are not met.
<u>Persistence and degradability</u>	
Persistence and degradability	The degradability of the product is not known.
<u>Bioaccumulative potential</u>	
Bioaccumulative Potential	No data available on bioaccumulation.
<u>Mobility in soil</u>	
Mobility	No data available.
<u>Results of PBT and vPvB assessment</u>	
<u>Other adverse effects</u>	
Other adverse effects	None known.

SECTION 13: Disposal considerations

Waste treatment methods

General information	The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.
Disposal methods	Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: Transport information

General	For limited quantity packaging/limited load information, consult the relevant modal documentation using the data shown in this section.
<u>UN number</u>	
UN No. (ADG)	1170
UN No. (IMDG)	1170
UN No. (ICAO)	1170

Ethanol

UN proper shipping name

Proper shipping name (ADG) ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

Proper shipping name (IMDG) ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

Proper shipping name (ICAO) ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

Transport hazard class(es)

ADG class 3

ADG classification code F1

ADG label 3

IMDG class 3

ICAO class/division 3

Transport labels



Packing group

ADG packing group II

IMDG packing group II

ICAO packing group II

Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

Special precautions for user

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

EmS F-E, S-D

Hazchem Code •2YE

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Inventories

Australia - AICS

None of the ingredients are listed or exempt.

SECTION 16: Any other relevant information

Training advice Only trained personnel should use this material.

Revision date 29/06/2016

Ethanol

Revision	1
SDS No.	4739
General Information	The following risk and hazard statements are to be considered a glossary. They relate to the raw materials used in this product and therefore may not be accurate for the finished product itself. For the complete risk and hazard statements for this product please refer to section 2 of this Safety Data Sheet
Hazard statements in full	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H332 Harmful if inhaled. H335 May cause respiratory irritation.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.