

**FOR FURTHER INFORMATION, PLEASE REFER TO THE SDS**

Issue: January 16

**PRODUCT:** Ethanol 100SGF4  
**Other Names:** Ethanol solution  
**Uses:** Industrial Solvent

<b>UN No.</b>	1170
<b>Dangerous Goods Class</b>	3
<b>Subsidiary Risk</b>	None
<b>Pack Group</b>	II
<b>Hazchem</b>	• 2YE
<b>Poison Schedule</b>	5

<b>Hazardous Nature:</b>	This product is classified as hazardous under Australia Safety and Compensation Council criteria
<b>Hazardous Classification:</b>	Flammable Liquids: 2; Acute Toxicity - Oral: 3; Skin Corrosion/Irritation: 2; Specific Target Organ Toxicity (Repeated Exposure): 1
<b>Hazardous Statement:</b>	Highly Flammable liquid and vapour
<b>Exposure Standards:</b>	TWA: 1880 mg/m <sup>3</sup> (1000 ppm); STEL: Not specified

**Physical Characteristics (Typical)**
**Section 9 of SDS**

Appearance	Clear, colourless liquid
Boiling Point/ Range (°C):	78
Flash Point (°C):	13
Specific Gravity/ Density (g/ml @ 15°C):	0.79 - 0.81
Chemical Stability:	Stable under room temperature and pressure

**Product Ingredients**
**Section 3 of SDS**

Anhydrous Ethanol	64-17-5	100
Water	7732-18-5	< 5
t-Butanol	75-65-0	0.25

For further ingredients information, please refer to the full SDS.

**GHS Pictograms**
**Section 2 of SDS**


For further Risk and Safety information, please refer to the full SDS.

**DEFINITIONS**

Dangerous Goods	Products that are classified as Dangerous for Storage and Transport: these products are allocated a UN No., with accompanying Class, Pack Group, and Sub. Risk, if required. Products that do not have a specific description under the code, but have low flash points, or such, must be classified under their most significant risk, eg. Flammable Goods N.O.S. (Not otherwise specified), UN 1993
Poisonous Substance	Products that are classified under the poisons schedule are a poisonous substance. The proportion of the poison in the product will determine its numerical classification.
Hazardous Substance	Products are considered to be Hazardous if they pose an intrinsic risk to human or environmental health, such as mutagens (able to change DNA), teratogens (able to result in birth defects), carcinogens (able to generate cell abnormalities), etc. Materials are not hazardous substances if they pose risks such as potential for misuse, like flammability, or explosions when heated and ignited.

**SUMMARY INFORMATION ONLY**

**1. IDENTIFICATION**

**Product Name:** Ethanol 100SGF4  
**Other Names:** Ethanol solution, Perfume Grade Ethanol, Eucalyptus Alcohol  
Sanitising Alcohol.  
**Chemical Family:** Industrial Solvent  
**Supplier:** Sydney Solvents Pty. Ltd.  
**ABN:** 51 104 642 695  
**Street Address:** Unit 3, 10 Production Place, Jamisontown 2750 02 4722 5060  
**Telephone:**

**Emergency phone:** CHEMCALL: 1800 605 040

**2. HAZARDS IDENTIFICATION****Hazardous Nature**

This product is classified as hazardous under Australia Safety and Compensation Council criteria

**Hazardous Classification**

Flammable Liquids: 2; Acute Toxicity - Oral: 3; Skin Corrosion/Irritation: 2; Specific Target Organ Toxicity (Repeated Exposure): 1

**Hazardous Statement**

Highly Flammable liquid and vapour

**GHS Pictograms****Hazard Statements**

H225: Highly flammable liquid and vapour

H301: Toxic if swallowed

H372: Causes damage to organs through prolonged or repeated exposure

AUH066: Repeated exposure may cause skin dryness or cracking

**Precautionary Statements**

P102: Keep out of reach of children.

P233: Keep container tightly closed.

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P262: Do not get in eyes, on skin, or on clothing.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P273: Avoid release to the environment.

**Dangerous Goods Classification 3****Poisons Schedule 5**

**3. COMPOSITION: Information on Ingredients**

Chemical Ingredient	CAS No.	Proportion (%v/v)
Anhydrous Ethanol	64-17-5	100
Water	7732-18-5	< 5
t-Butanol	75-65-0	0.25

**4. FIRST AID MEASURES**

For advice, contact Poisons Information Centre (Phone Australia: 13 1126) or a doctor.

**Ingestion**

If swallowed, DO NOT induce vomiting. Keep at rest. Seek immediate medical attention.

**Eye Contact**

Flush eyes with large amounts of water until irritation subsides. Seek immediate medical attention.

**Skin Contact**

Flush area with large amounts of water and wash area with soap if available. Remove contaminated clothing, including shoes, and launder before reuse. Seek medical attention for skin irritations.

**Inhalation**

Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Seek immediate medical attention.

**First Aid facilities**

Provide eye baths and safety showers.

**Medical Attention**

Treat according to symptoms. Avoid gastric lavage: risk of aspiration of product to the lungs with the potential to cause chemical pneumonitis.

**5. FIRE FIGHTING MEASURES**

Shut off product that may 'fuel' a fire if safe to do so. Allow trained personnel to attend a fire in progress, providing firefighters with this Safety Data Sheet. Prevent extinguishing media from escaping to drains and waterways.

**Suitable extinguishing media**

Alcohol resistant foam, or if unavailable, water fog, or fine mist

**Hazards from combustion products**

Carbon monoxide and carbon dioxide, water and hydrogen gas

**Precautions for fire fighters and special protective equipment**

Full protective clothing and self-contained breathing apparatus

**Hazchem Code:** • 2YE

**6. ACCIDENTAL RELEASE MEASURES****Emergency Procedures**

Prevent fluid from escaping to drains and waterways. Contain leaking packaging in a containment drum. Prevent vapours from building up in confined areas. Ensure that drain valves are closed at all times. Clean up and report spills immediately.

**Methods and materials for containment****Major Land Spill**

- Eliminate sources of ignition.
- Warn occupants of downwind areas of possible fire and explosion hazard.
- Prevent liquid from entering sewers, watercourses, or low-lying areas.
- Keep the public away from the area.
- Shut off the source of the spill if possible and safe to do so.
- Advise authorities if substance has entered a watercourse or sewer or has contaminated soil or vegetation.
- Take measures to minimise the effect on the ground water.
- Contain the spilled liquid with sand or earth.
- Recover by pumping – use explosion proof pump or hand pump – or with a suitable absorbent material.

- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.
- See “First Aid Measures” and “Stability and Reactivity”

**Major Water Spill**

- Eliminate any sources of ignition.
- Warn occupants and shipping in downwind areas of possible fire and explosion hazard.
- Notify the port or relevant authority and keep the public away from the area.
- Shut off the source of the spill if possible and safe to do so.
- Confine the spill if possible.
- Remove the product from the surface by skimming or with suitable absorbent material.
- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.
- See “First Aid Measures” and “Stability and Reactivity”.

**7. HANDLING AND STORAGE****Precautions for safe handling**

This product is flammable. Do not open near open flame, sources of heat or ignition. No smoking. Keep container closed. Handle containers with care. Open slowly to control possible pressure release. Material will accumulate static charge. Use grounding leads to avoid discharge (electrical spark).

**Conditions for safe storage**

Store in a cool, dry place away from direct sunlight. Do not pressurise, cut, heat or weld containers - residual vapours are flammable. This product is flammable and will fuel a fire in progress.

**Incompatible materials**

None specified

**8. EXPOSURE CONTROLS: PERSONAL PROTECTION****National Exposure Standards**

The time weighted average concentration (TWA) for this product is: 1880 mg/m<sup>3</sup> (1000 ppm), which means the highest allowable exposure concentration in an eight-hour day for a five-day working week. The short-term exposure limit (STEL) is: Not specified, which is the maximum allowable exposure concentration at any time.

**Biological limit values**

None specified

**Engineering Controls: Ventilation**

The use of local exhaust ventilation is recommended to control process emissions near the source. Laboratory samples should be handled in a fume hood. Provide mechanical ventilation of confined spaces. Use explosion-proof ventilation equipment.

**Personal Protective Equipment**

**Respiratory Protection:** Where concentrations in air may exceed the limits described in the National Exposure Standards, it is recommended to use a half-face filter mask to protect from overexposure by inhalation. A type “A” filter material is considered suitable for this product.

**Eye Protection:** Always use safety glasses or a face shield when handling this product.

**Skin/ Body Protection:** Always wear long sleeves and long trousers or coveralls, and enclosed footwear or safety boots when handling this product. It is recommended that chemical resistant gloves (e.g. PVC) be worn when handling this product.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Property	Unit of measurement	Typical value
Appearance	-	Clear, colourless liquid
Boiling Point/ Range	°C	78
Flash Point	°C	13
Density @ 15°C	g/ml	0.79 – 0.81
Vapour Pressure @ 20°C	kPa	44 mmHg
Explosive Limits (LEL – UEL)	%	3.5 – 19.0
Vapour Density @ 20°C	kPa	1.59

Property	Unit of measurement	Typical value
Autoignition Temperature	°C	392
Viscosity @ 20°C	cSt	No data available
Percent Volatiles	%	100
Solubility with Water	% w/w	Completely soluble

The values listed are indicative of this product's physical and chemical properties. For a full product specification, please consult the Product Data Sheet.

## 10. STABILITY AND REACTIVITY

### Chemical Stability

Stable under room temperature and pressure

### Conditions to avoid

Sources of heat and ignition, open flames.

### Hazardous decomposition products

Carbon monoxide, carbon dioxide and organic complexes on incomplete burning or oxidation

### Hazardous reactions

None specified

### Hazardous Polymerisation

Will not occur

## 11. TOXICOLOGICAL INFORMATION

### Acute Effects

#### **Ingestion**

If swallowed, will cause harmful central nervous system effects. Symptoms include excitation, euphoria, headache, dizziness, drowsiness, blurred vision, fatigue, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death. Severe, acute intoxication may cause hypoglycemia, hypothermia and extensor rigidity. Other effects may include decreased blood pressure, vomiting blood and blood discharges. Aspiration to the lungs may cause chemical pneumonitis.

#### **Eye Contact**

Vapours may irritate the eyes. Liquid and mists will severely irritate or damage the eyes.

#### **Skin Contact**

Moderately irritating to the skin. Brief contact may cause redness. Repeated or prolonged contact may lead to dermatitis with redness, itching, swelling and possible secondary infection. A small proportion of the population may develop an allergic skin reaction.

#### **Inhalation**

Moderately irritating to respiratory tract and mucous membranes. Inhalation of the vapour may result in headache, nausea and vomiting. High concentrations may cause central nervous system depression - symptoms outlined in 'Ingestion'.

### Chronic Effects

Chronic intoxication by swallowing or repeated inhalation, may cause degenerative changes in the liver, kidneys, hair, gastrointestinal tract and heart muscle. The combination of this product and Toluene produce potentiated (greatly increased) health effects. These symptoms can be found in 'Ingestion' and 'Inhalation'.

### Other Health Effects Information

Persons with pre-existing liver impairment, skin and respiratory disorders may be at an increased risk from exposure. Ethanol may also cause adverse reproductive effects. Concurrent absorption of ethanol and some drugs may cause adverse health effects. Ingestion of beverages containing ethanol by pregnant women is associated with 'foetal alcohol syndrome' in their babies. The IARC has evaluated alcohol drinking as a Group 1 carcinogenic to humans.

### Toxicological Information

Oral LD<sub>50</sub>: Rat: 7060 mg/kg

Dermal TC<sub>Lo</sub>: Rabbit: 20g/kg

**12. ECOLOGICAL INFORMATION****Ecotoxicity****Aquatic Toxicity**

Fish Toxicity (rainbow trout, goldfish, bluegill):	LC <sub>50</sub> (96hr): Fathead minnow: 13480000 µg/L
Daphnia Magna EC <sub>50</sub> (24 hr):	LC <sub>50</sub> (Mort): 5680000 µg/L
Blue-green algae (Toxicity threshold 7-8 days):	LO <sub>EC</sub> : 1450000 µg/L
Green algae (Toxicity threshold 7-8 days):	LO <sub>EC</sub> : 5000000 µg/L

**Persistence/ degradability**

This product readily biodegrades on exposure to light and air.

**Mobility**

This product is mobile on dilution, risking contamination of waterways, grasslands and soils.

**13. DISPOSAL CONSIDERATIONS****Disposal Methods**

Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor. Care should be taken to ensure compliance with national and local authorities. Packaging may still contain fumes and vapours that are flammable and harmful. Ensure that empty packaging is allowed to dry.

**Special Precautions for Landfill or Incineration**

This product is NOT suitable for disposal by either landfill or via municipal sewers, drains, natural streams or rivers. This product must be disposed as chemical waste in accordance with the local authority.

**14. TRANSPORT INFORMATION**

Road and Rail Transport		Marine Transport		Air Transport	
UN No.	1170	UN No.	1170	UN No.	1170
Proper Shipping Name	Ethanol Solutions	Proper Shipping Name	Ethanol Solutions	Proper Shipping Name	Ethanol Solutions
DG Class	3	DG Class	3	DG Class	3
Sub. Risk	None	Sub. Risk	None	Sub. Risk	None
Pack Group	II	Pack Group	II	Pack Group	II
Hazchem	• 2YE	Hazchem	• 2YE	Hazchem	• 2YE

**Dangerous Goods Segregation**

This product is classed as Dangerous Goods Class 3, packing group II. Please consult the Australian Dangerous Goods Code for Transport by Road and Rail for information.

**15. REGULATORY INFORMATION**

**Country/ Region:** Australia

**Inventory:** AICS

**Status:** Listed

**Poisons Schedule:** 5

**16. OTHER INFORMATION**

**Reasons for Issue:** Upgrade to GHS SDS; Amalgamated supplier changes in all sections

**Abbreviations:**

AICS: Australian Inventory of Chemical Substances

CAS Number: Chemical Abstracts Number

IARC: International Agency for Research on Cancer

NOHSC: National Occupational Health and Safety Council

**References:**

- Supplier Safety Data Sheets
- <http://chem.sis.nlm.nih.gov/chemidplus> (January 16)
- <http://hsis.ascc.gov.au/SearchHS.aspx> (January 16)
- Ecotoxicology data: [http://cfpub.epa.gov/ecotox/quick\\_query.htm](http://cfpub.epa.gov/ecotox/quick_query.htm) (January 16)
- Sax's Dangerous Properties of Industrial Materials, Richard J. Lewis Snr., pub. Canada (2000)

The information sourced for the preparation of this document was correct and complete at the time of writing to the best of the writer's knowledge. The document represents the commitment to the company's responsibilities surrounding the supply of this product, undertaken in good faith. This document should be taken as a safety guide for the product and its recommended uses, but is in no way an absolute authority. Please consult the relevant legislation and regulations governing the use and storage of this type of product. For further information, please contact Australasian Solvents and Chemicals Company Pty. Ltd.