

## MATERIAL SAFETY DATA SHEET

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

**Material Name:** Acid Alcohol  
**Catalogue Number:** AACDL-1L  
**Other Names:** Acidified Alcohol water mixture; Acid Alcohol 0.5% / 70%.  
**Recommended Use:** Used as a destainer in Hospital and Pathology laboratories.

**Supplier Name:** ProSciTech  
**Street Address:** 1/11 Carlton Street, Kirwan, Qld. 4817 Australia  
**Telephone Number:** (07) 4773 9444 - 8:30am – 5:00pm, Monday to Friday (excluding Public Holidays)  
**Emergency Contact:** (07) 4773 9444 - 8:30am – 5:00pm, Monday to Friday (excluding Public Holidays)

### SECTION 2 - HAZARDS IDENTIFICATION

**Hazard Classification:**  
 Not classified as hazardous according to criteria for Classifying Hazardous Substances [NOHSC:1008].

**Hazardous and/or Dangerous Nature:**  
 NON-HAZARDOUS SUBSTANCE. DANGEROUS GOODS.

**Risk Phrases:**  
 R11 Highly flammable.  
 R23 Toxic by inhalation.  
 R25 Toxic if swallowed.  
 R34 Causes burns.

**Safety Phrases:**  
 S1/2 Keep locked up and out of reach of children.  
 S7 Keep container tightly closed.  
 S9 Keep container in a well-ventilated place.  
 S16 Keep away from sources of ignition - No smoking.  
 S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
 S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
 S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

*Refer to Section 15 for Poisons Schedule.*

### SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

**Pure Substance (Proportion 100%):**

**Chemical Identity:** Acid Alcohol  
**Common Name(s):** Acidified Alcohol water mixture; Acid Alcohol 0.5% / 70%.  
**CAS Number:** Mixture: see below.

**Mixture Substance:**

<b>Ingredients</b>	<b>Cas Number(s)</b>	<b>Proportion (%)</b>
Ethyl alcohol [Ethanol]	64-17-5	70
Water	7732-18-5	29.5
Hydrogen chloride	7647-01-0	0.5

### SECTION 4 - FIRST AID MEASURES

**Ingestion:** If swallowed, DO NOT induce vomiting. Seek urgent medical assistance.  
**Inhalation:** Remove victim to fresh air. Apply resuscitation if victim is not breathing - Administer oxygen if breathing is difficult. Transport to hospital or doctor immediately.  
**Eye Contact:** If material is splashed into eyes, flush with plenty of water for at least 15 minutes, ensuring eyelids are held open. Immediately transport to hospital or doctor.  
**Skin Contact:** If material is splashed onto the skin, remove any contaminated clothing and wash skin thoroughly with water and soap if available.  
**First Aid Facilities:** Eyebath/eyewash, Safety shower & general washroom facilities.  
**Medical Attention & Special Treatment:**  
 Treat symptomatically.  
**Additional Information:**  
 Not available.

## SECTION 5 - FIRE FIGHTING MEASURES

### Suitable Extinguishing Media:

Use dry chemical, carbon dioxide or foam.

### Hazards from Combustion Products:

Emits oxides of carbon when heated to decomposition. Vapours from this product may travel or be moved by air currents and be ignited by pilot lights, other flames, smoking, sparks, heaters, electrical equipment, static discharge or other ignition sources at locations distant from the point of handling. Highly flammable liquid. Avoid all sources of ignition, heat and naked flames. Vapours may travel a considerable distance to source of ignition and ignite.

### Precautions for Fire Fighters:

Self-contained breathing apparatus (SCBA) required for fire-fighting personnel. If possible to do so safely, shut off fuel to fire. Use water spray to spray to cool fire-exposed surfaces and to protect personnel. Avoid spreading burning liquid with water used for cooling fire exposed containers when using water spray, boil-over may occur when the product temperature reaches the boiling point of water.

**Hazchem Code:** 2YE

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

### Emergency Procedures:

Keep unnecessary people away; Isolate hazard area and deny entry. Stay upwind; Keep out of low areas.

### Containment & Clean up:

Shut off ignition sources, no flares, smoking or flames in hazard area. Stop leak if you can do it without risk. Water spray may reduce vapour; but it may not prevent ignition in closed spaces.

#### SMALL SPILLS:

Take up with sand, dirt or vermiculite. DO NOT use sawdust. Use non-sparking tools or HEPA vacuum system. Place into labeled drum(s) for later disposal.

#### LARGE SPILLS:

Notify Emergency Services (Police or Fire Brigade). Tell them exact location, nature, hazards, quantities, type of vehicle and any other information that would be helpful. Contain spill. Remove all ignition sources and safely stop flow of spill. Bund area. Trained personnel should wear Personal Protective equipment as highlighted in this MSDS. Blanket the spill with foam or use water fog to disperse vapour clouds. Consult an expert regarding disposal of this product.

## SECTION 7 - HANDLING & STORAGE

### Precautions for Safe Handling:

A supplied air respirator or a Self-Contained Breathing Apparatus (SCBA) for emergencies should be available and checked regularly. For further information please refer to the Engineering Controls of this MSDS.

### Precautions for Safe Storage:

Store in a cool place and out of direct sunlight. Store away from sources of heat or ignition, strong alkalis, acids, combustibles and oxidizing agents. All equipment must be earthed. Store in original packages as approved by manufacturer. Check all fittings, valves, reticulation (piping) and any ancillary equipment for leaks.

## SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

**National Exposure Standards:** Ethyl alcohol [Ethanol]  
(Worksafe Australia)

**TWA 1,000 ppm**

**TWA 1,880 mg/m<sup>3</sup>**

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**Hydrogen Chloride >=0.5% Conc.<1%**

**TWA 5 ppm**

**TWA 7.5 mg/m<sup>3</sup>**

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**WATER**

**No exposure standard allocated.**

**Biological Limit Values:**

No biological limit allocated.

### Engineering Controls:

Highly flammable liquid. Maintain adequate ventilation at all times. Prevent accumulation of vapours in hollows or sumps. Eliminate any sources of ignition. Elevated temperature or mechanical action may form vapours, mists or fumes which may require local exhaust ventilation systems.

### Personal Protective Equipment:

CLOTHING: PVC or rubber apron.

GLOVES: PVC or rubber.

EYES: Chemical goggles or face shield to protect eyes.

RESPIRATORY PROTECTION: Avoid breathing of vapours/gases. Select and use respirators in accordance with AS/NZS 1715/1716. When gases exceed the exposure standards then the use of a half-face respirator with organic vapour cartridge is recommended. For high concentration use an atmosphere-supplied, positive pressure demand self-contained or airline breathing apparatus, complying with the requirements of AS/NZS 1715 is recommended. Filter capacity and respirator type depends on exposure levels and type of contaminant. If entering spaces where the airborne concentration of a contaminant is unknown then the use of a Self-contained breathing apparatus (SCBA) with positive pressure air supply complying with AS/NZS 1715 / 1716, or any other acceptable International Standard is recommended.

## SECTION 9 - PHYSICAL & CHEMICAL PROPERTIES

<b>Appearance:</b>	Straw / yellow liquid.
<b>Odour:</b>	Not available.
<b>pH:</b>	Not available.
<b>Vapour pressure (mm of Hg at °C):</b>	59hPa @ 20°C.
<b>Vapour density:</b>	Not available.
<b>Boiling point/range (°C):</b>	78°C/-117°C.
<b>Freezing/melting point (°C):</b>	Not available.
<b>Solubility:</b>	Soluble in all proportions.
<b>Specific gravity or density:</b>	Not available.
<b>Flash Point:</b>	-45°C.
<b>Flammable (explosive) limits:</b>	2.8-18.2% by volume.
<b>Ignition temperature:</b>	Not available.
<b>Additional Information:</b>	Not available.

## SECTION 10 - STABILITY AND REACTIVITY

<b>Chemical stability:</b>	Stable under normal conditions of use.
<b>Conditions to avoid:</b>	Heat, flames, ignition sources and incompatible materials.
<b>Incompatible Materials:</b>	Reacts with oxidising agents/acid/alkalis/amines/alcohols.
<b>Hazardous Decomposition Products:</b>	Emits oxides of carbon when heated to decomposition.
<b>Hazardous Reactions:</b>	Will not occur.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### Exposure and Health Effects:

Chronic: Prolonged or repeated skin contact may lead to dermatitis.

### Ingestion:

May cause irritation to mouth, throat and stomach with effects including mucous build up, irritation to the tongue and lips and pains in the stomach.

### Inhalation:

May cause irritation to the nose, throat and respiratory system with effects including: Dizziness, headache and possible confusion.

### Eye Contact:

May cause irritation to the eyes, with effects including: tearing, pain, stinging and blurred vision.

### Skin Contact:

May cause irritation to the skin, with effects including; Redness and itchiness.

**Human/Animal data:** Not available.

**Carcinogenic Category:** Group 3: Not classifiable as to its carcinogenicity to humans.

**Other Carcinogenic Information:** Carcinogenic Category applies to the 0.5% Hydrogen chloride.

## SECTION 12 – ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	This substance may cause long-term adverse effects in the environment.
<b>Persistence and degradability:</b>	Not available.
<b>Mobility:</b>	Not available.
<b>Additional Information:</b>	Not available.

## SECTION 13 - DISPOSAL CONSIDERATIONS

**Disposal Methods:**

Refer to appropriate authority in your State. Dispose of material through a licensed waste contractor. Advise flammable nature. Normally suitable for disposal by approved waste disposal agent.

**Special Precautions/Additional Informational:**

Not available.

## SECTION 14 - TRANSPORT INFORMATION

**UN Number:** UN1170  
**UN Proper Shipping Name:** Ethyl alcohol solution  
**Class and Subsidiary risk:** 3  
**Packing Group:** PG II  
**Special Precautions for User:** Classified as a CLASS 3 (FLAMMABLE LIQUID) Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail, 6th Edition.

Dangerous goods of Class 3 (Flammable Liquid) are incompatible in a placard load with any of the following:

- Class 1
- Class 2.1, if both the Class 3 and Class 2.1 dangerous goods are in bulk
- Class 2.3
- Class 4.2
- Class 5
- Class 6, if the Class 3 dangerous goods are nitromethane
- Class 7

Emergency information (Transport):

Dangerous Goods - Initial Emergency Response Guide (SAA/SNZ HB76:1997)

For LIQUIDS - Highly flammable, Guide No: 14

**Hazchem Code:**

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## SECTION 15 - REGULATORY INFORMATION

**Poison Schedule Number:** None Allocated.

## SECTION 16 - OTHER INFORMATION

**Date of preparation of MSDS:** March 11

**Comments:**

**List of Publications referenced when creating this MSDS;**

- Hazardous Substances Information System Consolidated Lists: Safe Work Australia.
- APPROVED CRITERIA FOR CLASSIFYING HAZARDOUS SUBSTANCES [NOHSC:1008(2004)] 3rd Edition: National Occupational Health and Safety Commission.
- Dangerous Goods - Initial Emergency Response Guide (SAA/SNZ HB76:1997).
- IATA Dangerous Goods Regulations.
- Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)].
- Australia Standard for the Uniform Scheduling of Drugs and Poisons [SUSPD] (Australian Government Department of Health and Ageing).

*This Material Safety Data Sheet (MSDS) has been prepared in compliance with the National code of Practice for the Preparation of Material Safety Data Sheets 2<sup>nd</sup> Edition [NOHSC:2011(2003)]. It is the user's responsibility to determine the suitability of this information for adoption of necessary safety precautions. The information published in this MSDS has been compiled from the publications listed in Section 16: to the best of our ability and knowledge these publications are considered accurate. We reserve the right to revise Material Safety Data Sheets as new information becomes available. Copies may be made for non-profit use.*

**... End of MSDS ...**