

AUSTRALIAN CHEMICAL REAGENTS  
**SAFETY DATA SHEET**

Date Prepared: March 2021  
Version No: 6

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## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

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Product Name: Formalin-Aceto-Alcohol  
Product Code: 4700  
Other Names: Nil  
Uses: Analytical Reagent

Supplier: Australian Chemical Reagents  
38-50 Bedford Street Gillman SA 5013

Contacts: Telephone: 61 08 84402000  
Fax: 61 08 84402001

Emergency Phone: **CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)**

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## 2. HAZARDS INFORMATION

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### GHS Classification

Flammable Liquids: Category 3  
Acute Toxicity- Oral: Category 4  
Acute Toxicity- Dermal: Category 4  
Acute Toxicity- Inhalation: Category 4  
Skin Corrosion/Irritation: Category 2  
Skin Sensitisation: Category 1  
Serious Eye Damage/Irritation: Category 2A  
Specific Target Organ Toxicity – Single Exposure: Category 2  
Carcinogenicity: Category 1B

Signal Word(s)  
Pictogram(s)

DANGER



Hazard Statement(s)

H226 Flammable liquid and vapour.  
H302 Harmful if swallowed.  
H312 Harmful in contact with skin.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
H350 May cause cancer.  
H371 May cause damage to organs (Eyes).

### Precautionary Statement(s)

<b>Preventative</b>	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking. P211 Do not spray on an open flame or other ignition source. P233 Keep container tightly closed. P240 Ground/bond container and receiving equipment. P241 Use explosion-proof electrical/ventilating/lighting/.../equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P260 Do not breathe dust/fume/gas/mist/vapours/spray. P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/protective clothing/eye protection/face protection. P281 Use personal protective equipment as required.
<b>Response</b>	P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P330 Rinse mouth. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P312 Call a POISON CENTER or doctor/physician if you feel unwell. P361 Remove/Take off immediately all contaminated clothing. P363 Wash contaminated clothing before reuse. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P312 Call a POISON CENTER or doctor/physician if you feel unwell. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/attention. P307+P311 IF exposed: Call a POISON CENTER or doctor/physician. P370+P378 In case of fire: Use foam/water spray/fog for extinction.
<b>Storage</b>	P403+P235 Store in a well-ventilated place. Keep cool. P405 Store locked up.
<b>Disposal</b>	P501 Dispose of contents/container to an approved waste disposal plant.

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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

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#### Ingredients :

Chemical Entity	CAS No	Proportion
Ethyl alcohol	[64-17-5]	49%
Formaldehyde	[50-00-0]	6%
Methanol	[67-56-1]	<2%
Acetic Acid	[64-19-7]	2.5%
Water	[7732-18-5]	to 100%

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### 4. FIRST AID MEASURES

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Safety showers and eye wash facilities should be provided.

#### **Swallowed :**

If conscious wash out mouth with water. Seek medical advice. Show this SDS to medical practitioner.

#### **Eye :**

Immediately hold eyelids open and flood with water for at least 15 minutes. Obtain medical aid. Show this SDS to medical practitioner.

**Skin :**

Remove contaminated clothing. Immediately wash skin thoroughly with water and mild soap. Seek medical advice. Show this SDS to medical practitioner. Launder clothing before reuse.

**Inhaled :**

Remove from contaminated air. Maintain breathing with artificial respiration if necessary. Seek medical assistance. Show this SDS to a doctor.

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## 5. FIRE FIGHTING MEASURES

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**Suitable Extinguishing Media:**

Water spray carbon dioxide, dry chemical powder, or appropriate foam.

**Hazards From Combustion Products:**

Flammable. Decomposition products include oxides of carbon. Formaldehyde vapour may be present.

**Precautions For Fire Fighters and Special Protective Equipment:**

Fire fighters and others who may be exposed to combustion products during fire should wear full protective clothing including positive pressure self-contained breathing apparatus (SCBA). Wear SCBA with full face-piece, operated in positive pressure mode when fighting fires.

**Hazchem Code:** •3YE

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## 6. ACCIDENTAL RELEASE MEASURES

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**Emergency procedures:**

Prevent from entering waterways. Restrict access to area. Remove chemicals that can react with the spilled material.

**Methods and materials for containment and clean up:**

Isolate all ignition sources. Ventilate area. Wear protective clothing. Use inert material such as sand or earth to contain spill or leak. Absorb spills with chemical absorber or vermiculite and dispose of in accordance with local regulations.

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## 7. HANDLING AND STORAGE

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**Precautions for Safe Handling:**

Do not get in eyes, on skin, on clothing. Avoid all personal exposure. Do not mix with oxidising agents.

**Conditions for Safe Storage:**

Flammable liquid storage required. Store sealed in original container in a cool well ventilated situation away from foods and other chemicals. Do not store in direct sunlight. Refer to AS 1940 - *The storage and handling of flammable and combustible liquids* for storage procedures. Observe good hygiene and housekeeping practices.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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**National Exposure Standards:**

Safe Work Australia – Ethanol 1880mg/m<sup>3</sup> TWA  
Formaldehyde 1.2mg/m<sup>3</sup> (TWA) 2.5mg/m<sup>3</sup> (STEL)

**Biological Limit Values:** No data available.

**Engineering Controls:**

Use only in chemical fume hood. Ensure fume hood is regularly maintained.

**Personal Protective Equipment (PPE):**

The use of nitrile or neoprene gloves complying with AS 2161 and the use of faceshield, chemical goggles or safety glasses with side shield protection complying with AS/NZS 1337 is recommended.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>Appearance :</b>	Clear mobile liquid
<b>Odour:</b>	Alcohol
<b>pH:</b>	Not applicable
<b>Boiling Point (°C) :</b>	79

<b>Freezing/melting Point:</b>	Not applicable
<b>Vapour Pressure (mm of Hg @ 25°C) :</b>	45
<b>Vapour Density:</b>	1.4
<b>Specific Gravity :</b>	0.8
<b>Flash Point (°C) :</b>	13 cc
<b>Flammability Limits (%) :</b>	LEL 3.3 UEL 24.5
<b>Solubility in Water (g/L) :</b>	Soluble

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## 10. STABILITY AND REACTIVITY

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### **Chemical stability:**

Stable.

### **Conditions to avoid:**

Heat. Ignition sources.

### **Incompatible materials:**

Oxidizing agents, peroxides, acids, acid chlorides, acid anhydrides, alkali metals, ammonia.

### **Hazardous decomposition products:**

Refer to section 5 (Fire Fighting Measures).

### **Hazardous reactions:**

Hazardous polymerization will not occur.

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## 11. TOXICOLOGICAL INFORMATION

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### **Health Effects:**

**Swallowed** : Harmful if swallowed. May lead to central nervous system depression, nausea, dizziness, headache, gastric irritation. For ethanol oral – human LDLo 1400 mg/kg For formaldehyde oral-woman LDLo 108mg/kg oral-rat LD50 800mg/kg..

**Eye** : Irritating to eyes. 100mg ethanol applied to rabbit eyes produced moderate irritation after 24 hours. 1ppm formaldehyde in 6 minutes caused mild irritation. 50ug formaldehyde applied to rabbit eyes caused severe irritation after 24 hrs.

**Skin** : Harmful if absorbed through skin. May defat skin. 500mg ethanol applied to rabbit skin produced severe irritation after 24 hours. For formaldehyde skin-rabbit LD50 270mg/kg 150ug formaldehyde applied to human skin for 3 days caused mild irritation.

**Inhaled** : Vapour is irritating to mucous membranes and respiratory tract. : Harmful by inhalation. May result in dizziness, headaches and nausea. For ethanol LC50 inhalation rat 20000 ppm / 10 hours. For formaldehyde Inhalation- rat LC50 590mg/m<sup>3</sup>.

**Chronic Effects:**. Long term exposure may include liver, heart and kidney damage. Repeated skin contact may cause dermatitis. Formaldehyde is considered probable human carcinogen May result in sensitisation and allergic reaction through inhalation and skin contact

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## 12. ECOLOGICAL INFORMATION

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### **Ecotoxicity:**

No data available.

### **Persistence and degradability:**

No data available.

### **Mobility:**

No data available.

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## 13. DISPOSAL CONSIDERATIONS

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Contact a licensed professional waste disposal service to dispose of this material and container. Observe all federal, state and local environmental regulations.

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## 14. TRANSPORT INFORMATION

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**UN Number:** 1993

**UN Proper Shipping Name:** FLAMMABLE LIQUID N.O.S. (Contains ethanol 49%)

**Class and subsidiary risk(s):** 3  
**Packing Group:** 11  
**Hazchem Code:** •3YE  
**Special precautions for user :** Nil

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## **15. REGULATORY INFORMATION**

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**Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP):** S6

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## **16. OTHER INFORMATION**

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**Disclaimer:**

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END of SDS