

AUSTRALIAN CHEMICAL REAGENTS  
**SAFETY DATA SHEET**

Date Prepared: December 2021  
Version No: 6

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## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

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Product Name: Perchloric Acid 0.1 N in Acetic Acid  
Product Code: 0024  
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: 61 08 84402000 Mon – Fri 8:30am – 5:00pm

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## 2. HAZARDS INFORMATION

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### GHS Classification

Flammable Liquids: Category 3  
Skin Corrosion/Irritation: Category 1A

Signal Word(s)  
Pictogram(s)

DANGER



Hazard Statement(s)

H226 Flammable liquid and vapour.  
H314 Causes severe skin burns and eye damage.

Precautionary Statement(s)  
Preventative

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

<b>Response</b>	P260 Do not breathe dust/fume/gas/mist/vapours/spray. P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. 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. P310 Immediately call a POISON CENTER or doctor/physician. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P370+P378 In case of fire: Use water spray, carbon dioxide or dry chemical for extinction.
<b>Storage</b>	P403+P235 Store in a well-ventilated place. Keep cool.
<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
Perchloric acid	[7601-90-3]	1%
Acetic acid	[67 - 19 - 7]	99%

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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.

#### **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.

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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. Restrict access. 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. Neutralise residues with sodium bicarbonate.

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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. Do not store in direct sunlight. Observe good hygiene and housekeeping practices.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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### National Exposure Standards:

SWA – Acetic acid 25mg/m<sup>3</sup> (TWA) 37mg/m<sup>3</sup> (STEL)

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

### Engineering Controls:

Do not breathe vapours. Maintain atmospheric concentrations well below exposure standards with flameproof extraction ventilation.

### Personal Protective Equipment (PPE):

The use of butyl rubber 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>	Vinegar
<b>pH:</b>	Not applicable
<b>Boiling Point (°C) :</b>	118
<b>Freezing/melting Point:</b>	17
<b>Vapour Pressure (mm of Hg @ 25°C) :</b>	11
<b>Vapour Density:</b>	Not known
<b>Specific Gravity :</b>	1.05
<b>Flash Point (°C) :</b>	39 cc
<b>Flammability Limits (%) :</b>	LEL 4 UEL 16
<b>Solubility in Water (g/L) :</b>	miscible

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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 hypochlorites, cyanides, sulphides, metals

### 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 :** Extremely destructive to tissue. For acetic acid, LD50 oral rat 3530mg/kg.

**Eye :** Very corrosive to eye tissue. For acetic acid a 100mg rinse produced mild irritation in rabbit eyes.

**Skin** : Corrosive to skin tissue. 50mg of acetic acid produced mild irritation after 24 hours..

**Inhaled** : Irritating to tissue of respiratory tract. May cause spasm, inflammation and oedema of the larynx and bronchi , chemical pneumonitis and pulmonary oedema. May result in coughing, wheezing, laryngitis,shortness of breath, headache, nausea and vomiting. For acetic acid LCLO (rat) 16000ppm/4 hrs.

**Chronic Effects:** No data available

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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:** 2920

**UN Proper Shipping Name:** CORROSIVE LIQUID FLAMMABLE N.O.S.

**Class and subsidiary risk(s):** 8, 3

**Packing Group:** 11

**Hazchem Code:** 2W

**Special precautions for user :** Nil

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## 15. REGULATORY INFORMATION

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**Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP):**

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## 16. OTHER INFORMATION

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