

**MATERIAL SAFETY DATA SHEET**  
**Hazardous according to criteria of Worksafe Australia**

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**Date of Issue : May 1999**

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**1. IDENTIFICATION**

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**General**

Product Name : ACETIC ACID SOLUTION, >10% but <80% acid, by mass

Other Names : ACETIC ACID 10-80% SOLUTION

UN No. : 2790

Dangerous Goods Class : 8

Subsidiary Risk : None Allocated

Hazchem Code : 2R

Pack Group : II

EPG : 36

Poisons Schedule : 5

Uses :

Manufacturing of acetic anhydride, cellulose acetate, and vinyl acetate monomer; acetic esters; chloroacetic acid; production of plastics, pharmaceuticals, dyes, insecticides, photographic chemicals, etc., food additive (acidulant); latex coagulant; oil-well acidiser; textile printing.

**1.1 Physical Description / Properties**

Appearance : Clear, colourless liquid with a pungent odour.

Formula : CH<sub>3</sub>COOH

Boiling Point : 118 deg C

Melting Point : N/A deg C

Vapour Pressure : N/A

Specific Gravity : N/A (water = 1)

Flash Point : N/A

pH : 2.4 (1 molar soln in H<sub>2</sub>O)

Solubility in water : N/A g/l (25 deg C)

Flammability Limits (as percentage volume in air)

Lower Explosion Limit : N/A

Upper Explosion Limit : N/A

### 1.2 Other Properties

Autoignition temperature = 426 deg C Will mix with water in all proportions.

### 1.3 Ingredients

Chemical Entity	CAS No.	Proportions (%)
ACETIC ACID	[ 64-19-7]	10 - 80
WATER	[ 7732-18-5]	20 - 90

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## **2. HEALTH HAZARD INFORMATION**

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### **2.1 Health Effects - Acute**

#### **Swallowed**

If swallowed causes internal irritation and damage.

#### **Eye**

High concentrations of vapours will cause irritation.

#### **Skin**

The liquid can burn the skin and cause ulcers.

#### **Inhaled**

The vapour is an irritant to the mucous membranes and respiratory tract.

### **2.2 Health Effects - Chronic**

No data available

### **2.3 First Aid**

#### **Swallowed**

Thoroughly rinse mouth with water. Give 1 - 3 cups of water to drink. DO NOT induce vomiting. Seek immediate medical assistance.

## **Eye**

Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids should be held open.

## **Skin**

Immediately wash contaminated skin with plenty of water. Remove all contaminated clothing. Seek medical advice.

## **Inhaled**

Remove victim from exposure. Ensure airways are clear and have qualified person give oxygen through a face mask. Seek medical advice.

## **First Aid Facilities**

Ensure an eye bath and safety shower are available and ready for use.

## **2.5 Advice to Doctor**

Treat symptomatically based on judgement of doctor and individual reactions of patient.

## **2.6 Toxicity Data**

Oral LD50 = 3310 mg/kg (Rat) Dermal LD50 = not available Inhalation LC50 = not available

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## **3. PRECAUTIONS FOR USE**

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### **3.1 Exposure Standards**

The following exposure standards have been established by Worksafe Australia : Acetic acid : TWA 10ppm (25 mg/m<sup>3</sup>) STEL 15ppm (37 mg/m<sup>3</sup>)

### **3.2 Engineering Controls**

Ensure adequate ventilation to maintain exposure levels below standards.

### **3.3 Personal Protection**

Avoid skin and eye contact. The following personal protective equipment must be worn : overalls or similar protective apparel, safety glasses, goggles or faceshield as appropriate, rubber gloves. Wash hands and face after handling material and before work breaks, eating, drinking, smoking or using toilet facilities.

### **3.4 Flammability**

Material is not flammable in concentrations less than 80%.

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## **SAFE HANDLING INFORMATION**

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### **4.1 Storage / Transport**

Store in accordance with all Commonwealth, State or Territory regulations relevant to Class 8 substances. Transport in accordance with the Australian Dangerous Goods Code. Keep containers tightly sealed. Keep away all sources of ignition. Take precautions against static discharges. Ensure all storage areas are well ventilated. Protect from heat. Store in a cool dry area.

### **4.2 Packaging / Labelling**

UN No. 2790

Class 8

Sub Risk None Allocated

Hazchem Code 2R

Pack Group II

EPG No. 36

Shipping Name ACETIC ACID SOLUTION, >10% but <80% acid, by mass

Hazard CORROSIVE

### **Risk Phrases**

R34 Causes burns.

R41 Risk of serious damage to eyes.

### **Safety Phrases**

S2 Keep out of the reach of children.

S23:ACACID Do not breathe fumes/vapour.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

## **4.3 Spills and Disposal**

### **Spills**

Shut off all possible sources of ignition. Clean-up personnel should wear full protective clothing and face shield. Wear breathing apparatus if exposure standards are exceeded.

Wash area down with excess water. Increase ventilation in the area.

### **Disposal**

Flush waste material to sewer as a greatly diluted solution. Dispose of in accordance with all Local, State and Federal regulations.

#### 4.4 FIRE AND EXPLOSION HAZARD

##### Fire / Explosion

When exposed to heat or flame, material can react vigorously with oxidising agents, particularly dangerous in contact with chromic acid, sodium peroxide, nitric acid. Explosion hazard is low.

##### Extinguishing Media

Fire-fighters should wear full protective clothing including self-contained breathing apparatus. Use equipment/media appropriate to surrounding fire conditions.

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#### 5 OTHER INFORMATION

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##### Other Information

Aquatic toxicity TLm 96h, 100 10ppm

##### 5.1 Contact Points

Organisation	Location	Telephone	Ask For
Redox Chemicals Pty Ltd	Wetherill Park NSW	02-97255155	Technical Officer
Poisons Information Centre	Westmead	131129	