

AUSTRALIAN CHEMICAL REAGENTS  
**MATERIAL SAFETY DATA SHEET**

Date Prepared: February 2013  
Version No: 4

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**1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

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Product Name: Glass Cleaning Solution  
Product Code: 0438  
Other Names:  
Uses: Cleaning Analytical Glassware

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**

Corrosive to metals: Category 1  
Acute Toxicity – Dermal: Category 4  
Skin Corrosion/Irritation: Category 1A  
Sensitization - Respiratory: Category 1B  
Germ Cell Mutagenicity: Category 1B  
Carcinogenicity: Category 1A  
Toxic to Reproduction: Category 1B  
Specific target organ toxicity - Repeated Exposure, Inhalation: Category 1  
Hazardous to the Aquatic Environment - Long-Term Hazard: Category 1

**Signal Word(s)**  
**Pictogram(s)**

DANGER

**Hazard Statement(s)**

H290 May be corrosive to metals.  
H312 Harmful in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H330 Fatal if inhaled.  
H334 May causes allergy or asthma symptoms or breathing difficulties if inhaled.  
H340 May cause genetic defects.  
H350 May cause cancer.  
H360 May damage fertility or the unborn child.  
H372 Causes damage to organs through prolonged or repeated exposure if inhaled.  
H411 Toxic to aquatic life with long lasting effects.

**Precautionary Statement(s)**  
**Preventative**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.  
P234 Keep only in original container.  
P261 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.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P285 In case of inadequate ventilation wear respiratory protection.

<b>Response</b>	P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P362 Take off contaminated clothing and wash before reuse. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. 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. P308+P313 IF exposed or concerned: Get medical advice/attention. P391 Collect spillage.
<b>Storage</b>	P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P406 Store in corrosive resistant/... container with a resistant inner liner.
<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
Sulphuric Acid	[ 7664-93-9 ]	97%
Chromium trioxide	[1333-82-0]	3%

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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 if irritation persists. 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:**

Sulphuric acid and its solutions will not burn or support combustion. However contact with aluminium, zinc or tin may generate explosive hydrogen gas. Decomposition products include sulphur oxides.

### **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:** 2W

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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:**

Use inert material such as sand or earth to contain spill or leak. Neutralise with sodium bicarbonate. 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 prolonged or repeated exposure. Do not pipette by mouth.

### **Conditions for Safe Storage:**

Store sealed in original container in a cool well ventilated situation away from foods and other chemicals. 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:**

Safe Work Australia – Sulphuric acid 1mg/m<sup>3</sup> TWA 3mg/m<sup>3</sup> STEL Chromium (VI) Compd=s (water sol) 0.05 mg/m<sup>3</sup> TWA (Sensitising agent)

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

### **Engineering Controls:**

Not required with normal use. If mists are likely to be generated maintain atmospheric concentrations well below exposure standards with extraction ventilation.

### **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 brown liquid
<b>Odour:</b>	Nil
<b>pH:</b>	<1
<b>Boiling Point (°C) :</b>	Not applicable
<b>Freezing/melting Point:</b>	Not applicable
<b>Vapour Pressure (mm of Hg @ 25°C) :</b>	Not applicable
<b>Vapour Density:</b>	Not applicable
<b>Specific Gravity :</b>	1.84

<b>Flash Point (°C) :</b>	Not flammable
<b>Flammability Limits (%) :</b>	Not flammable
<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:

Excessive heat.

### Incompatible materials:

Alkalis, hypochlorites, organic materials, sulphites, sulphides, cyanides, aluminum, phosphorus, tin and zinc.

### 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 :** Very corrosive to tissue. Causes severe burns. May cause severe injury or death. For sulphuric acid oral - rat LD50 2140mg/kg. For chromium trioxide oral - rat LD50 80mg/kg.

**Eye :** Very corrosive to eye tissue. May cause permanent damage including loss of sight. For sulphuric acid 100mg rinse produced severe irritation of rabbit eyes.

**Skin :** Very corrosive to skin tissue. Harmful. Causes severe burns. May produce severe necrosis.

**Inhaled :** Not considered a hazard with normal laboratory use. For sulphuric acid LC50 inhalation - rat 510mg/m<sup>3</sup>/2hours. Inhalation of mists may be fatal as a result of spasm, inflammation and oedema of larynx and bronchi, chemical pneumonitis and pulmonary oedema.

**Chronic Effects:** Prolonged exposure to sulphuric acid mists may cause erosion of teeth, chronic irritation of eyes and respiratory system. Mists and vapours are suspected carcinogenic agents. Chromium trioxide is a carcinogen and sensitising agent.

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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. Observe all federal, state and local environmental regulations.

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## 14. TRANSPORT INFORMATION

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**UN Number:** 2240

**UN Proper Shipping Name:** CHROMOSULPHURIC ACID

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

**Packing Group:** I

**Hazchem Code:** 2W

**Special precautions for user:** Never add water to this product.

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## **15. REGULATORY INFORMATION**

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

Schedule 6

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## **16. OTHER INFORMATION**

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### **Disclaimer:**

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