

AUSTRALIAN CHEMICAL REAGENTS  
**SAFETY DATA SHEET**

Date Prepared: November 2018  
Version No: 5

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## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

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Product Name: Brown Standard Solution Eu Pharm  
Product Code: 2687  
Other Names: -  
Uses: Analytical Reagent

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

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24 HOUR EMERGENCY CONTACT CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888  
(International)

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## 2. HAZARDS INFORMATION

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### GHS Classification

Corrosive to metal: Category 1  
Skin Corrosion/Irritation: Category 2  
Skin Sensitisation: Category 1B  
Serious Eye Damage/Irritation: Category 2A  
Respiratory Sensitisation: Category 1  
Carcinogenicity: Category 1B  
Reproductive Toxicity: Category 1B

Signal Word(s)  
Pictogram(s)

DANGER



### Hazard Statement(s)

H290 May be corrosive to metals.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H334 May cause allergy or asthma symptoms or breathing.  
H350 May cause cancer.  
H360 May damage fertility or the unborn child.

### 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 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.  
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.  
P285 In case of inadequate ventilation wear respiratory protection.

#### Response

P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P333+P313 If skin irritation occurs: Get medical advice/attention.  
P362 Take off contaminated clothing and wash before reuse.  
P304 + P341 IF INHALED: If breathing is difficult, 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.  
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.  
P308+P313 IF exposed or concerned: Get medical advice/attention.  
P390 Absorb spillage to prevent material damage.

#### Storage

P405 Store locked up.  
P406 Store in corrosive resistant/ ... container with a resistant inner liner.

#### Disposal

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 |
|-----------------------------|--------------|------------|
| Hydrochloric acid           | [7647-01-0]  | 1%         |
| Cobalt chloride hexahydrate | [[7646-79-9] | 1.8%       |
| Ferric chloride             | [7705-08-0]  | 1.3%       |
| Copper Sulphate             | [7758-98-7]  | 1.5%       |
| 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 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:**

Hydrochloric 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 hydrogen and ferric chlorides.

**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:** 2X

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## 6. ACCIDENTAL RELEASE MEASURES

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**Emergency procedures:**

Prevent from entering waterways. Restrict access to area. Ventilate 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.

**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 – Hydrogen chloride 7.5mg/m<sup>3</sup> TWA & Peak Limitation

Cobalt metal dust & fume as Co 0.05mg/m<sup>3</sup> TWA

Copper dusts & mists as Cu 1mg/m<sup>3</sup> TWA

Iron salts soluble as Fe 1mg/m<sup>3</sup> TWA

**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                  |
| <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** : Harmful. May be irritating to tissue. Ingestion may cause vomiting, diarrhoea. For hydrogen chloride LD50 oral - rat 900mg/kg.

**Eye** : Irritating to eye tissue. For hydrochloric acid 100mg rinse produced mild irritation of rabbit eyes.

**Skin** : May be irritating to skin tissue. May be harmful by skin absorption.

**Inhaled** : May be irritating to respiratory tissue. For hydrogen chloride LCLo human 1300ppm for 30 minutes, 3000ppm for 5 minutes

**Chronic Effects**: Prolonged contact may cause sensitisation of skin and allergic reactions.

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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:** 3264

**UN Proper Shipping Name:** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Contains Hydrochloric acid 1%)

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

**Packing Group:** 111

**Hazchem Code:** 2X

**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):**

Schedule 5

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## 16. OTHER INFORMATION

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### Disclaimer:

All information given by the Company is offered in good faith and is believed to the best of our knowledge to be accurate. However this information is offered without warranty representation inducement or licence and the Company does not assume legal responsibility for reliance upon the same.

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END of SDS