

AUSTRALIAN CHEMICAL REAGENTS  
**SAFETY DATA SHEET**

Date Prepared: July 2023  
Version No: 8

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## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

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Product Name: Gold Standards 0.25 - 100 mg/L in Hydrochloric acid 20% and Nitric acid 10%  
Product Code: 5374 0.25 mg/L  
5539 0.5 mg/L  
4835 1.0 mg/L  
4836 2.0 mg/L  
4837 5.0 mg/L  
4731 10.0 mg/L  
4732 50.0 mg/L  
4839 75.0 mg/L  
4840 100.0 mg/L

Other Names:

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** Skin Corrosion/Irritation: Category 1  
Serious Eye Damage/Irritation: Category 1  
Corrosive to metals: Category 1  
Specific Target Organ Toxicity – Single Exposure: Category 3

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



**Hazard Statement (s)** H290 May be corrosive to metals  
H314 Causes severe skin burns and eye damage.  
H335 May cause respiratory irritation.

**Precautionary Statement(s)  
Preventative**

P234 Keep only in original container  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P264 Wash thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Response** P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

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.

**Storage** P405 Store locked up.  
P403+P233 Store in a well ventilated place. Keep container tightly closed.  
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
Gold Chloride	[13453-07-1]	<1%
Hydrochloric acid	[ 7647-01-0]	20%
Nitric acid	[ 7697-37-2]	10%
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:**

Solutions will not burn or support combustion. Decomposition products include hydrogen chloride.

#### **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. Remove chemicals that can react with the spilled material. Spills are slippery

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

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 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 Nitric acid 5.2mg/m<sup>3</sup> TWA 10mg/m<sup>3</sup> Peak Limitation

**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 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>	1.1
<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:

Acidic solution. Will corrode metals. Will produce toxic gases on contact with cyanides, sulphides etc.

### Incompatible materials:

Strong alkalis, powdered 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 :** Corrosive to gastric system. For hydrogen chloride LD50 oral - rat 900mg/kg.

**Eye :** Corrosive to eye tissue. For hydrogen chloride 100mg rinse produced mild irritation of rabbit eye.

**Skin :** Corrosive to skin.

**Inhaled** : Not considered a hazard with normal use. For hydrogen chloride LCLo human 1300ppm for 30 minutes, 3000ppm for 5 minutes.

**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. 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 20% Nitric acid 10%)

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

**Packing Group:** II

**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:**

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END of SDS