AUSTRALIAN CHEMICAL REAGENTS

SAFETY DATA SHEET

Date Prepared: July 2023

Version No: 8

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

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

2. HAZARDS INFORMATION

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) Pictogram(s)

DANGER





Hazard Statement (s) H290 May be corrosive to metals

H314 Causes serve 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.

COMPOSITION / INFORMATION ON INGREDIENTS

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%

4. FIRST AID MEASURES

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.

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.

FIRE FIGHTING MEASURES

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

ACCIDENTAL RELEASE MEASURES

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.

7. HANDLING AND STORAGE

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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National Exposure Standards:

Safe Work Australia – Hydrogen chloride 7.5mg/m³ TWA & Peak Limitation Nitric acid 5.2mg/m³ TWA 10mg/m³ 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Clear liquid

Odour: Nil pH: 1

Boiling Point (0 C):

Freezing/melting Point:

Vapour Pressure (mm of Hg @ 25 0 C):

Not applicable

Not applicable

Not applicable

Not applicable

Specific Gravity: 1.1

Flash Point (°C):

Flammability Limits (%):

Solubility in Water (g/L):

Not flammable

Not flammable

Soluble

10. STABILITY AND REACTIVITY

Chemical stability:

Stable.

Conditions to avoid:

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

Incompatible materials:

Strong alkalies, powdered metals.

Hazardous decomposition products:

Refer to section 5 (Fire Fighting Measures).

Hazardous reactions:

Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

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.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

No data available.

Persistence and degradability:

No data available.

Mobility:

No data available.

13. DISPOSAL CONSIDERATIONS

Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state and local environmental regulations.

14. TRANSPORT INFORMATION

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

15. REGULATORY INFORMATION

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

Schedule 5

16. OTHER INFORMATION

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.

Every person dealing with the materials referred to herein does so at his or her own risk absolutely and must make independent determinations of suitability and completeness of information from all sources to ensure their proper use.

END of SDS