SAFETY DATA SHEET

Date Prepared: August 2017
Version No: 1

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:	Vanadate-Molybdate Reagent
Product Code:	5708
Other Names:	Nil
Uses:	Analytical Reagent
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 2
Serious Eye Damage/Irritation: Category 2A
Corrosive to metals: Category 1
Specific Target Organ Toxicity–Single Exposure: Category 3

Signal Word(s)

WARNING

Pictogram(s)



Hazard Statement (s)

H290 May be corrosive to metals
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Precautionary Statement(s)

Preventative

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

Response

P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
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.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.
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.
P314 Get medical advice/attention if you feel unwell.
P390 Absorb spillage to prevent material damage.

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.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients :

Chemical Entity	CAS No	Proportion
Hydrochloric acid	[7647-01-0]	7.2%
Ammonium Metavanadate	[7803-55-6]	0.25
Ammonium Molybdate	[12054-85-2]	2.5
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.

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.

5. FIRE FIGHTING MEASURES

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 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.

6. ACCIDENTAL RELEASE MEASURES

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.

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/m^3 TWA & 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) :	Not applicable
Freezing/melting Point:	Not applicable
Vapour Pressure (mm of Hg @ 25^{0}C) :	Not applicable
Vapour Density:	Not applicable
Specific Gravity :	1
Flash Point (^{0}C) :	Not flammable
Flammability Limits (%) :	Not flammable
Solubility in Water (g/L) :	Soluble

10. STABILITY AND REACTIVITY

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.

11. TOXICOLOGICAL INFORMATION

Health Effects:
Swallowed : 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 : Irritating to skin tissue.
Inhaled : May be irritating to respiratory tissue. 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, ACID, INORGANIC , NOS (contains hydrochloric acid 7.2%)
Class and subsidiary risk(s): 8
Packing Group: 11
Hazchem Code: 2X
Special precautions for user : Nil

15. REGULATORY INFORMATION

Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP):
Schedule 6

16. OTHER INFORMATION

Disclaimer: