AUSTRALIAN CHEMICAL REAGENTS

SAFETY DATA SHEET

Date Prepared: November 2021
Version No: 6

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Multi (8) Elements 4000 Cd Zn Cu 2000 Pb 1000 Co 500 Fe 200 Tl100 Ni
Product Code: 4548
Other Names:
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

Acute Toxicity Oral: Category 4
Acute Toxicity Dermal: Category 4
Skin Corrosion/Irritation: Category 2
Serious Eye Damage/Irritation: Category 2A
Specific Target Organ Toxicity – Single Exposure (Respiratory Tract) 3

Signal Word(s) WARNING

Pictogram(s)

Hazard Statement(s)

H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation

Precautionary Statement(s)
Preventative

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink, or smoke when using this product.
P271 Use only outdoors or in a well-ventilated.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P330 Rinse mouth.
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.

Storage P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Disposal P501 Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients :

Chemical Entity	CAS No	Proportion
Cadmium nitrate	[10022-68-1]	1.1%
Zinc nitrate	[10196-18-6]	1.2%
Copper nitrate	[19004-19-4]	0.4%
Lead nitrate	[10099-74-8]	0.4%
Cobalt nitrate	[10026-22-9]	0.5%
Ferric nitrate	[7782-61-8]	0.4%
Thallium nitrate	[10102-45-1]	<0.1%
Nickel nitrate	[13478-00-7]	<0.1%
Nitric acid	[7697-37-2]	2%
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:

Solutions will not burn or support combustion. Decomposition products include oxides of nitrogen.

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. 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:
SWA – Cadmium and compounds (as Cd) TWA 0.01 mg/m^3 (Cat 2 carcinogen); Copper dusts and mists (as Cu) TWA 1mg/m^3 ; Lead, inorganic dusts or fumes (as Pb) TWA 0.15 mg/m^3 ; Cobalt, metal dusts or fumes (as Co) TWA 0.05 mg/m^3 ; Nickel soluble compounds (as Ni) TWA 0.1mg/m^3 (Sensitiser); Nitric acid TWA 5.2 mg/m^3 STEL 10 mg/m^3

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 :	1.1
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:
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 : Harmful if swallowed. May result in kidney damage. May burn or irritate gastric tissue. For cadmium LD50 oral rat 225mg/kg. For cobalt nitrate hexahydrate oral rat LD50 691 mg/kg. For nickel nitrate hexahydrate oral rat LD50 1620 mg/kg.

Eye : Irritating to eye tissue.

Skin : Harmful if absorbed through skin. May irritate skin tissue with prolonged contact.

Inhaled : Harmful if inhaled. Inhalation of vapours may irritate nose and throat. Inhalation of mists into lungs can cause pneumonitis. For cadmium inhalation human LCLo 39mg/m^3/20 minutes.

Chronic Effects: Cadmium is a carcinogen. Nickel nitrate is a cancer suspect agent. Repeated or prolonged skin contact may cause dermatitis.

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 N.O.S (Contains nitric acid 2%)
Class and subsidiary risk(s): 8
Packing Group: III
Hazchem Code: 2X
Special precautions for user : Nil

15. REGULATORY INFORMATION

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP):
Schedule 5

16. OTHER INFORMATION