AUSTRALIAN CHEMICAL REAGENTS

SAFETY DATA SHEET

Date Prepared: July 2018
Version No: 5

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Multi Element 1000 mg/L As Cd Cr Co Cu Mo Ni Pb Zn
Product Code: 2121
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

Carcinogenicity: Category 1A
Eye Damage/Irritation: Category 2A
Serious Eye Damage/Irritation: Category 2A
Germ Cell Mutagenicity: Category 1B
Reproductive Toxicity: Category 1B
Hazardous to the Aquatic Environment - Long-Term Hazard: Category 3
Hazardous to the Aquatic Environment - Acute Hazard: Category 3
Corrosive to metals: Category 1

Signal Word(s) DANGER

Pictogram(s)



Hazard Statement(s)

H290 May be corrosive to metals.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H340 May cause genetic defects.
H350 May cause cancer.
H360 May damage fertility or the unborn child.
H412 Harmful to aquatic life with long lasting effects.

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.
P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P281 Use personal protective equipment as required.

Response P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P361 Remove/Take off immediately all contaminated clothing.
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.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients :

Chemical Entity	CAS No	Proportion
Arsenic(V) oxide	[12044-50-7]	0.2%
Cadmium nitrate	[10022-68-1]	0.3%
Chromium nitrate	[7789-02-8]	0.8%
Copper nitrate	[19004-19-4]	0.2%
Zinc nitrate	[10196-18-6]	0.3%
Lead nitrate	[10099-74-8]	0.2%
Nickel nitrate	[13478-00-7]	0.5%
Cobalt nitrate	[10026-22-9]	0.5%
Ammonium molybdate	[12054-85-2]	0.2%
Nitric acid	[7697-37-2]	2 to 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:
Solutions will not burn or support combustion. Decomposition products include oxides of nitrogen and arsenic.

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

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:
Safe Work Australia - Nitric acid TWA 5.2 mg/m^3 STEL 10 mg/m^3; Arsenic and soluble compounds (as As) TWA 0.05 mg/m^3 (Cat 1 carcinogen); Cadmium and compounds (as Cd) TWA 0.01 mg/m^3 (Cat 2 carcinogen); Chromium (II & III) comp'ds (as Cr) 0.5 mg/m^3 ; Cobalt, metal dusts or fumes (as Co) TWA 0.05 mg/m^3 ; Copper dusts and mists (as Cu) TWA 1mg/m^3 ; Nickel soluble compounds (as Ni) TWA 0.1mg/m^3 (Sensitiser); Lead, inorganic dusts or fumes (as Pb) TWA 0.15 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. Arsenic is carcinogenic. May burn or irritate gastric tissue. For arsenic oral-man LD50 1430 ug/kg , LD50 oral rat 40mg/kg. For cadmium LD50 oral rat 225mg/kg. For Ammonium molybdate oral rat LD50: 333 mg/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 : 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.

Chronic Effects: Arsenic and cadmium are carcinogens. 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 INORGANIC N.O.S (Contains nitric acid 2 to 5%)
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 Drugs and Poisons (SUSDP):
Schedule 7

16. OTHER INFORMATION

Disclaimer:
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END of SDS