AUSTRALIAN CHEMICAL REAGENTS

SAFETY DATA SHEET

Date Prepared: August 2023

Version No: 6

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Hardness Indicator Solution

Product Code: 0213 Other Names: Nil

Uses: Analytical Reagent

Supplier: Australian Chemical Reagents

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1. HAZARDS INFORMATION

GHS Classification

Flammable Liquids: Category 2

Serious Eye Damage/Irritation: Category 2A

Signal Word(s) Pictogram(s)

DANGER



Hazard Statement(s) H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

Precautionary Statement(s)

Preventative P210 Keep away from heat/sparks/open flames/hot surfaces. –

No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof

electrical/ventilating/lighting/.../equipment. P242 Use only non-sparking tools. P264 Wash thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye

protection/face protection.

Response P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately

all contaminated clothing. Rinse skin with water/shower.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P363 Wash contaminated clothing before reuse.

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. P370+P378 In case of fire: Use water spray, carbon dioxide or dry chemical for extinction.

Storage P403+P235 Store in a well-ventilated place. Keep cool.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients:

Chemical Entity	CAS No	Proportion
Eriochrome Black	[1787-61-7]	1%
Ethyl alcohol	[64-17-5]	70%
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.

Eve:

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. 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:

Flammable. Decomposition products include oxides of carbon.

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: •3YE

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures:

Prevent from entering waterways. Restrict access to area. Remove chemicals that can react with the spilled material.

Methods and materials for containment and clean up:

Isolate all ignition sources. Ventilate area. Wear protective clothing. 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 all personal exposure. Do not mix with oxidising agents.

Conditions for Safe Storage:

Flammable liquid storage required. Store sealed in original container in a cool well ventilated situation away from foods and other chemicals. Do not store in direct sunlight. Refer to AS 1940 - *The storage and handling of flammable and combustible liquids* for storage procedures. Observe good hygiene and housekeeping practices.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National Exposure Standards:

Safe Work Australia – Ethanol 1880mg/m³ TWA

Biological Limit Values: No data available.

Engineering Controls:

If mists are likely to be generated maintain atmospheric concentrations well below exposure standards with flameproof 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 : Dark Blue Liquid

Odour: Alcohol pH: Not applicable

Boiling Point (°C): 79

Freezing/melting Point: Not applicable

Vapour Pressure (mm of Hg @ 25° C): 45 Vapour Density: 1.4 Specific Gravity: 0.8 Flash Point ($^{\circ}$ C): 13 cc

Flammability Limits (%): LEL 3.3 UEL 24.5

Solubility in Water (g/L): Soluble

10. STABILITY AND REACTIVITY

Chemical stability:

Stable.

Conditions to avoid:

Heat. Ignition sources.

Incompatible materials:

Oxidizing agents, peroxides, acids, acid chlorides, acid anhydrides, alkali metals, ammonia.

Hazardous decomposition products:

Refer to section 5 (Fire Fighting Measures).

Hazardous reactions:

Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Health Effects:

Swallowed : May cause burning taste. May lead to central nervous system depression, nausea, dizziness, headache, gastric irritation. For ethanol oral – human LDLo 1400 mg/kg

Eye: Irritating to eyes. 100mg ethanol applied to rabbit eyes produced moderate irritation after 24 hours.

Skin: May irritate skin tissue. May defat skin. 500mg ethanol applied to rabbit skin produced severe irritation after 24 hours.

Inhaled : Vapour is irritating to mucous membranes and respiratory tract. May be harmful if inhaled. May result in dizziness, headaches and nausea. For ethanol LC50 inhalation rat 20000 ppm / 10 hours.

Chronic Effects:. Long term exposure may include liver, heart and kidney damage. Repeated 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 and container. Observe all federal, state and local environmental regulations.

14. TRANSPORT INFORMATION

UN Number: 1993

UN Proper Shipping Name: FLAMMABLE LQUID N.O.S. (contains ethanol 70%)

Class and subsidiary risk(s): 3

Packing Group: 11
Hazchem Code: •3YE

Special precautions for user: Nil

15. REGULATORY INFORMATION

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

Not Scheduled

16. OTHER INFORMATION

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END f SDS