World Headquarters Hach Company P.O.Box 389 Loveland, CO USA 80539 (970) 669-3050

MATERIAL SAFETY DATA SHEET

Emergency Telephone Numbers:

24 Hour Service

8am - 4pm CST

(Medical and Transportation)

(303) 623-5716

(515)232-2533

MSDS No: M00582

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Titrant Solution Hardness 3 0.015 M EDTA

Catalog Number: 42632

Hach Company P.O.Box 389 Loveland, CO USA 80539 (970) 669-3050

MSDS Number: M00582 Chemical Name: Not applicable CAS No.: Not applicable Chemical Formula: Not applicable

Chemical Formula: Not applicable Chemical Family: Not applicable

UN Number/PIN: NA

Intended Use: Laboratory Use Hardness determination

Date of MSDS Preparation:

Day: 06 **Month:** June **Year:** 2014

MSDS Prepared: MSDS prepared by Product Compliance Department extension 3350

2. HAZARDS IDENTIFICATION

Emergency Overview:

Appearance: Clear, colorless liquid

Physical State: Liquid

Odor: None
HMIS:
Health: 0
Flammability: 0
Reactivity: 0

Protective Equipment: X - See protective equipment, Section 8.

Potential Health Effects:

Eye Contact: No effects are anticipated Skin Contact: No effects are anticipated Skin Absorption: No effects anticipated Target Organs: Not applicable Ingestion: No Effects Anticipated Target Organs: Not applicable Inhalation: No effects anticipated

Medical Conditions Aggravated: None reported Chronic Effects: No effects anticipated

Cancer / Reproductive Toxicity Information:

Target Organs: Not applicable

This product does NOT contain any IARC listed chemicals. This product does NOT contain any NTP listed chemicals.

Additional Cancer / Reproductive Toxicity Information: None reported

Toxicologically Synergistic Products: None reported WHMIS Hazard Classification: Not applicable

WHMIS Symbols: Not applicable

3. COMPOSITION / INFORMATION ON INGREDIENTS

Propylene Glycol

Percent Range: 20.0 - 30.0

Percent Range Units: weight / weight

CAS No.: 57-55-6 *LD50*: Oral rat, 20 g/kg

LC50: Inhalation rat LC50 = 2180 mg/m3/6h/90 day intermittent

TLV: Not established *PEL:* Not established

Ingredient WHMIS Symbol: Not applicable

Demineralized Water

Percent Range: 65.0 - 75.0

Percent Range Units: weight / weight

CAS No.: 7732-18-5

LD50: LD50 oral rat = >89,800 mg/kg

LC50: None reported *TLV:* Not established *PEL:* Not established

Ingredient WHMIS Symbol: Not applicable

Ethylenediaminetetraacetic Acid, Disodium Salt

Percent Range: < 0.5

Percent Range Units: weight / weight

CAS No.: 6381-92-6

LD50: Oral rat LD50 = 2000 mg/kg

LC50: None reported

TLV: 10 mg/m³ as inhalable dust; 3 mg/m³ as respirable dust **PEL**: 15 mg/m³ as total dust; 5 mg/m³ as respirable dust

Ingredient WHMIS Symbol:

EDTA Tetrasodium Salt

Percent Range: < 0.5

Percent Range Units: weight / weight

CAS No.: 64-02-8

LD50: Oral Rat LD50 = 630 - 2700 mg/kg

LC50: None reported

TLV: 10 mg/m³ as inhalable dust; 3 mg/m³ as respirable dust PEL: 15 mg/m³ as total dust; 5 mg/m³ as respirable dust

Ingredient WHMIS Symbol:

4. FIRST AID MEASURES

Eye Contact: Flush eyes with water. Call physician if irritation develops.

Skin Contact (First Aid): Wash skin with plenty of water.

Ingestion (First Aid): Give large quantities of water. Call physician immediately.

Inhalation: None required.

5. FIRE FIGHTING MEASURES

Flammable Properties: Material will not burn. Material will not burn.

Flash Point: Not applicable Method: Not applicable Flammability Limits: Lower Explosion Limits: Not applicable Upper Explosion Limits: Not applicable Autoignition Temperature: Not applicable

Hazardous Combustion Products: This material will not burn. *Fire / Explosion Hazards:* This product will not burn or explode.

Static Discharge: None reported. Mechanical Impact: None reported

Extinguishing Media: Use media appropriate to surrounding fire conditions

Fire Fighting Instruction: As in any fire, wear self-contained breathing apparatus pressure-demand and full protective

gear.

6. ACCIDENTAL RELEASE MEASURES

Spill Response Notice:

Only persons properly qualified to respond to an emergency involving hazardous substances should respond to a spill involving chemicals. See Section 13, Special Instructions for disposal assistance.

Containment Technique: Stop spilled material from being released to the environment.

Clean-up Technique: If permitted by regulation, Absorb spilled liquid with non-reactive sorbent material. Mark bag 'Non-hazardous trash', and dispose of as normal refuse. Decontaminate the area of the spill with a soap solution. Otherwise, Pick up spill for disposal and place in a closed container Dispose of in accordance with local, state and federal regulations or laws.

Evacuation Procedure: Evacuate as needed to perform spill clean-up. If conditions warrant, increase the size of the evacuation.

D.O.T. Emergency Response Guide Number: None

7. HANDLING AND STORAGE

Handling: Wash thoroughly after handling. Maintain general industrial hygiene practices when using this product. *Storage:* Keep container tightly closed when not in use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Maintain general industrial hygiene practices when using this product.

Personal Protective Equipment:

Eye Protection: safety glasses with top and side shields

Skin Protection: Not applicable

Inhalation Protection: adequate ventilation

Precautionary Measures: Wash thoroughly after handling.

TLV: Not established PEL: Not established

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, colorless liquid

Physical State: Liquid

Molecular Weight: Not applicable

Odor: None *pH:* 5.0

Vapor Pressure: Not determined Vapor Density (air = 1): Not determined Boiling Point: > 100° C (>212° F) Melting Point: Not determined

Specific Gravity/Relative Density (water = 1; air =1): 1.026

Evaporation Rate (water = 1): 0.63

Volatile Organic Compounds Content: Not determined

Coefficient of Water / Oil: Not applicable

Solubility:
Water: Soluble
Acid: Soluble

Other: Not determined

Metal Corrosivity:
Steel: Not determined
Aluminum: Not determined

10. STABILITY AND REACTIVITY

Chemical Stability: Stable when stored under proper conditions.

Conditions to Avoid: Not applicable Reactivity / Incompatibility: None reported

Hazardous Decomposition: No hazardous decomposition products known.

Hazardous Polymerization: Will not occur.

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11. TOXICOLOGICAL INFORMATION

Product Toxicological Data:

LD50: None reported *LC50:* None reported

Dermal Toxicity Data: None reported Skin and Eye Irritation Data: None reported

Mutation Data: Propylene Glycol: Cytogenetic analysis, DNA inhibition mouse - subcutaneous - 8000 mg/kg

Reproductive Effects Data: Propylene Glycol: Intraperitoneal mouse TDLo = 100 mg/kg -fetoxicity, post implantation

mortality

Ingredient Toxicological Data: Propylene Glycol: Oral rat LD50 = 20 g/kg; Dermal rabbit LD50 = 20.8 g/kg

12. ECOLOGICAL INFORMATION

Product Ecological Information: --

No ecological data available for this product. Mobility in soil: No data available

Ingredient Ecological Information: Propylene Glycol: Pimephales promelas LC50 = 51400 mg/L; Daphnia magna 48 h LC50 34400 mg/L; Selenastrum capricornutum 96 h 19000 mg/L. Ethylenediaminetetraacetic Acid Disodium Salt: 96 Hr LC50 bluegill = 159 mg/L (Static).

13. DISPOSAL CONSIDERATIONS

Special Instructions (Disposal): Open cold water tap completely, slowly pour the material to the drain. Allow cold water to run for 5 minutes to completely flush the system. Otherwise, Dispose of material in an E.P.A. approved hazardous waste facility.

Empty Containers: Rinse three times with an appropriate solvent. Dispose of empty container as normal trash. *NOTICE (Disposal):* These disposal guidelines are based on federal regulations and may be superseded by more stringent state or local requirements. Please consult your local environmental regulators for more information.

14. TRANSPORT INFORMATION

T.D.G.:

Proper Shipping Name: Not Currently Regulated

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Hazard Class: NA UN Number/PIN: NA Packing Group: NA Subsidiary Risk: NA

Additional Information: There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is NOT in a set or kit, the classification given above applies. If the item IS part of a set or kit, the classification would change to the following: UN3316 Chemical Kit, Class 9, PG II or III. If the item is not regulated, the Chemical Kit classification does not apply.

15. REGULATORY INFORMATION

National Inventories:

Canadian Inventory Status: DSL Listed: Yes

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

16. OTHER INFORMATION

References: Air Contaminants, Federal Register, Vol. 54, No. 12. Thursday, January 19, 1989. pp. 2332-2983. TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. In-house information. Vendor Information. Technical Judgment.

Legend:

NA - Not Applicable w/w - weight/weight
ND - Not Determined w/v - weight/volume
NV - Not Available v/v - volume/volume

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

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