

## SAFETY DATA SHEET

### 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

**Emergency Telephone Numbers:**  
(Medical and Transportation)  
(303) 623-5716 24 Hour Service  
(515)232-2533 8am - 4pm CST

**MSDS Number:** M00582  
**Chemical Name:** Not applicable  
**CAS Number:** Not applicable  
**Additional CAS No. (for hydrated forms):** Not applicable  
**Chemical Formula:** Not applicable  
**Chemical Family:** Not applicable  
**Intended Use:** Laboratory Use Hardness determination

### 2. HAZARDS IDENTIFICATION

This mixture is not classified as hazardous per GHS (UN publication ST/SG/AC.10/36/Add.3)

**GHS Classification:**

**Hazard categories:**

**GHS Label Elements:**

Not applicable

**Hazard statements:**

**Precautionary statements:** If skin irritation occurs: Get medical advice/attention.

**HMIS:**

**Health:** 0

**Flammability:** 0

**Reactivity:** 0

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

**NFPA:**

**Health:** 0

**Flammability:** 0

**Reactivity:** 0

**Symbol:** Not applicable

**WHMIS Hazard Classification:** Not applicable

**WHMIS Symbols:** Not applicable

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Hazardous Components according to GHS:**

**Ethylenediaminetetraacetic Acid, Disodium Salt**

**CAS Number:** 139-33-3

**Chemical Formula:**  $C_{10}H_{14}N_2Na_2O_8 \cdot 2H_2O$

**GHS Classification:** Acute Tox. 5-Orl, H303; Eye Irrit. 2A, H319; Aquatic Acute 2, H401

**Percent Range:** < 0.5

**Percent Range Units:** weight / weight

**PEL:** 15 mg/m<sup>3</sup> as total dust; 5 mg/m<sup>3</sup> as respirable dust

**TLV:** 10 mg/m<sup>3</sup> as inhalable dust; 3 mg/m<sup>3</sup> as respirable dust

**WHMIS Symbols:** Not applicable  
**EDTA Tetrasodium Salt**

**CAS Number:** 64-02-8  
**Chemical Formula:**  $C_{10}H_{12}N_2Na_4O_8 \cdot 2H_2O$   
**GHS Classification:** Acute Tox. 4-Orl, H302; Eye Dam. 1, H318  
**Percent Range:** < 0.5  
**Percent Range Units:** weight / weight  
**PEL:** 15 mg/m<sup>3</sup> as total dust; 5 mg/m<sup>3</sup> as respirable dust  
**TLV:** 10 mg/m<sup>3</sup> as inhalable dust; 3 mg/m<sup>3</sup> as respirable dust

**WHMIS Symbols:** Other Toxic Effects  
**Hazardous Components according to GHS:** No  
**Demineralized Water**

**CAS Number:** 7732-18-5  
**Chemical Formula:** H<sub>2</sub>O  
**GHS Classification:** Not a dangerous substance according to GHS.  
**Percent Range:** 65.0 - 75.0  
**Percent Range Units:** weight / weight  
**PEL:** Not established  
**TLV:** Not established

**WHMIS Symbols:** Not applicable  
**Propylene Glycol**

**CAS Number:** 57-55-6  
**Chemical Formula:** C<sub>3</sub>H<sub>8</sub>O<sub>2</sub>  
**GHS Classification:** Not a dangerous substance according to GHS.  
**Percent Range:** 20.0 - 30.0  
**Percent Range Units:** weight / weight  
**PEL:** Not established  
**TLV:** Not established

**WHMIS Symbols:** Not applicable

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#### 4. FIRST AID MEASURES

**General Information:** In the event of exposure, show this Material Safety Data Sheet and label (where possible) to a doctor.

**Advice to doctor:** Treat symptomatically.

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

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

**Inhalation:** None required.

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

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#### 5. FIRE FIGHTING MEASURES

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

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

**Extinguishing Media:** Use media appropriate to surrounding fire conditions

**Extinguishing Media NOT To Be Used:** Not applicable

**Fire / Explosion Hazards:** This product will not burn or explode.

**Hazardous Combustion Products:** This material will not burn.

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## 6. ACCIDENTAL RELEASE MEASURES

**Spill Response Notice:**

Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should respond to a spill involving chemicals.

**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.

**DOT Emergency Response Guide Number:** Not applicable

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## 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.

**Flammability Class:** Not applicable

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## 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

**For Occupational Exposure Limits (OEL) for ingredients, see section 3 - Composition/Information on Ingredients.:**

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Clear, colorless liquid

**Physical State:** Liquid

**Molecular Weight:** Not applicable

**Odor:** None

**Odor Threshold:** Odorless

**pH:** 5.0

**Metal Corrosivity:**

**Corrosivity Classification:** Not classified as corrosive to metals according to GHS criteria.

**Steel:** Not determined

**Aluminum:** Not determined

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

**Viscosity:** Not determined

**Solubility:**

**Water:** Soluble

**Acid:** Soluble

**Other:** Not determined

**Partition Coefficient (n-octanol / water):** Not applicable

**Coefficient of Water / Oil:** Not applicable

**Melting Point:** Not determined

**Decomposition Temperature:** Not determined

**Boiling Point:** > 100° C (>212° F)

**Vapor Pressure:** Not determined  
**Vapor Density (air = 1):** Not determined  
**Evaporation Rate (water = 1):** 0.63  
**Volatile Organic Compounds Content:** Not determined  
**Flammable Properties:** 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  
**Explosive Properties:**  
Not classified according to GHS criteria.  
**Oxidizing Properties:**  
Not classified according to GHS criteria.  
**Reactivity Properties:**  
Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria.  
**Gas under Pressure:**  
Not classified according to GHS criteria.

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## 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable when stored under proper conditions.  
**Mechanical Impact:** None reported  
**Static Discharge:** None reported.  
**Reactivity / Incompatibility:** None reported  
**Hazardous Decomposition:** No hazardous decomposition products known.  
**Conditions to Avoid:** Not applicable

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## 11. TOXICOLOGICAL INFORMATION

**Toxicokinetics, Metabolism and Distribution:** No information available for mixture.  
**Toxicologically Synergistic Products:** None reported  
**Acute Toxicity:** Acute Toxicity Estimate (ATE) - Calculated from Ingredient Toxicity Data  
ATE Oral Rat LD50 = 165868 mg/kg  
**Specific Target Organ Toxicity - Single Exposure (STOT-SE):** Based on classification principles, the classification criteria are not met.  
**Specific Target Organ Toxicity - Repeat Exposure (STOT-RE):** Based on classification principles, the classification criteria are not met.  
**Skin Corrosion/Irritation:** Based on classification principles, the classification criteria are not met. Irritating to skin.  
**Eye Damage:** Based on classification principles, the classification criteria are not met.  
**Sensitization:** Based on classification principles, the classification criteria are not met.  
**CMR Effects/Properties (carcinogenic, mutagenic or toxic to reproduction):** No germ cell mutagenicity, carcinogenicity or reproductive toxicity data found.  
This product does NOT contain any IARC listed chemicals.  
This product does NOT contain any NTP listed chemicals.  
This product does NOT contain any OSHA listed carcinogens.  
**Symptoms/Effects:**  
**Ingestion:** No Effects Anticipated  
**Inhalation:** No effects anticipated  
**Skin Absorption:** No effects anticipated  
**Chronic Effects:** No effects anticipated  
**Medical Conditions Aggravated:** None reported

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## 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; Sclenastrum capricornutum 96 h 19000 mg/L. Ethylenediaminetetraacetic Acid Disodium Salt: 96 Hr LC50 bluegill = 159 mg/L (Static).

CEPA Statement: Water: Persistent. Not bioaccumulative. Not inherently toxic to aquatic organisms.

CEPA Statement: EDTA Tetrasodium Salt, Ethylenediaminetetraacetic Acid Disodium Salt, Propylene Glycol: Not persistent. Not bioaccumulative. Not inherently toxic to aquatic organisms.

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### 13. DISPOSAL CONSIDERATIONS

**EPA Waste ID Number:** Not applicable

**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. In Europe: Chemical and analysis solutions must be disposed of in compliance with the respective national regulations. Product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system.

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### 14. TRANSPORT INFORMATION

**D.O.T.:**

**D.O.T. Proper Shipping Name:** Not Currently Regulated

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**Hazard Class:** NA

**Subsidiary Risk:** NA

**ID Number:** NA

**Packing Group:** NA

**T.D.G.:**

**Proper Shipping Name:** Not Currently Regulated

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**Hazard Class:** NA

**Subsidiary Risk:** NA

**UN Number/PIN:** NA

**Packing Group:** NA

**I.C.A.O.:**

**I.C.A.O. Proper Shipping Name:** Not Currently Regulated

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**Hazard Class:** NA

**Subsidiary Risk:** NA

**ID Number:** NA

**Packing Group:** NA

**I.M.O.:**

**Proper Shipping Name:** Not Currently Regulated

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**Hazard Class:** NA

**Subsidiary Risk:** NA

**ID Number:** NA

**Packing Group:** 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.

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### 15. REGULATORY INFORMATION

**U.S. Federal Regulations:**

**O.S.H.A.:** This product does not meet the criteria for a hazardous substance as defined in the Hazard Communication Standard. (29 CFR 1910.1200)

**E.P.A.:**

**S.A.R.A. Title III Section 311/312 Categorization (40 CFR 370):** This product is not hazardous under 29 CFR.1910.1200 and therefore is not covered by Title III under SARA.

**S.A.R.A. Title III Section 313 (40 CFR 372):** This product does NOT contain any chemical subject to the reporting requirements of Section 313 of Title III of SARA.

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**302 (EHS) TPQ (40 CFR 355):** Not applicable

**304 CERCLA RQ (40 CFR 302.4):** Not applicable

**304 EHS RQ (40 CFR 355):** Not applicable

**Clean Water Act (40 CFR 116.4):** Not applicable

**RCRA:** Contains no RCRA regulated substances.

**State Regulations:**

**California Prop. 65:** No Prop. 65 listed chemicals are present in this product.

**Identification of Prop. 65 Ingredient(s):** None

**California Perchlorate Rule CCR Title 22 Chap 33:** Not applicable

**Trade Secret Registry:** Not applicable

**National Inventories:**

**U.S. Inventory Status:** TSCA Listed: Yes

**CAS Number:** Not applicable

**Canadian Inventory Status:** DSL Listed: Yes

**EEC Inventory Status:** EINECS Listed: Yes

**Australian Inventory (AICS) Status:** All ingredients are listed.

**New Zealand Inventory (NZIoC) Status:** All components either listed or exempt.

**Korean Inventory (KECI) Status:** All components of this product are either listed, listed as the anhydrous compound or exempt.

**Japan (ENCS) Inventory Status:** All components either listed or exempt.

**China (PRC) Inventory (MEP) Status:** All components either listed or exempt.

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## 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.

**Complete Text of H phrases referred to in Section 3:** H302 Harmful if swallowed. Not applicable H318 Causes serious eye damage. H319 Causes serious eye irritation.

**Revision Summary:** Substantial revision to comply with EU Reg 1272/2008, Reg 1907/2006 and UN GHS (ST/SG/AC.10/36/Add.3).

**Date of MSDS Preparation:**

**Day:** 06

**Month:** June

**Year:** 2014

**MSDS Prepared:** MSDS prepared by Product Compliance Department extension 3350

**CCOHS Evaluation Note:** It is offered under exemption from WHMIS labeling as specified in the Controlled Products Regulation (CPR) Section 17. It is offered under the interim policy that was established by Health Canada permitting use of GHS-formatted safety data sheets in Canada prior to revision of CPR to GHS. This product has been classified and labeled in accordance with the requirements of GHS (ST/SG/AC.10/36/Add.3). This SDS has been prepared in accordance with the requirements of GHS (ST/SG/AC.10/36/Add.3).

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**Legend:**

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

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Date Printed 5/18/15  
MSDS No: M00582*

**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.

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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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