Material Safety Data Sheet

Section 1 – Chemical Product and Company Identification


Product Identity: Eriochrome Black T Indicator

Chemical Family: Not Applicable
Synonyms: Not Applicable
Recommended Use: Laboratory chemicals

Manufacturer’s Name: AquaPhoenix Scientific, Inc., 9 Barnhart Dr., Hanover, PA 17331, (866) 632-1291
Emergency Contact Number (24hr): Chemtel (800) 255-3924

Issue Date: 01/08/07
Revision Date: 06/05/08, 05/07/10, 07/07/10, 10/06/10, 02/19/12, 05/9/13

Section 2 – Hazard Identification

Emergency Overview: Flammable. May irritate the respiratory system. May cause irritation to the eyes. Wash areas of contact with water. If ingested, give large quantity of water and induce vomiting and get medical assistance.

Appearance: Dark, Blue Liquid
Odor: Alcohol

Target Organs: Central nervous system, Eyes, Skin, and Respiratory system.

Potential Health Effects/ Routes of Exposure:
Eyes: May cause burning and stinging irritation and possible damage to cornea and conjunctiva.
Skin: Results in cracking and burning which may lead to secondary infections and dermatitis.
Ingestion: May cause nausea, vomiting, cramps, and diarrhea.
Inhalation: May cause mild irritation of the mucous membrane and upper respiratory tract.

Chronic Effect / Carcinogenicity: Repeated ingestion of Triethanolamine has caused kidney and liver damage. None (IARC, NTP, OSHA)

Aggravated Medical Conditions: No information available
These chemicals are considered hazardous by OSHA.
See section 11 for toxicological information. See section 12 for potential environmental effects.

Section 3 – Composition, Information on Ingredients

Triethanolamine, CAS# 102-71-6, 75% v/v
Ethanol, CAS# 64-17-5, 25% v/v
Eriochrome Black T, CAS# 1787-61-7, 0.04% w/v

Section 4 – First Aid

Eyes: Immediately flush eyes with water for at least 15 minutes. Immediately get medical assistance.
Skin: Flush with water for 15 minutes. Get medical assistance if irritation develops.
Ingestion: Dilute with water or milk. Induce vomiting. Get medical assistance.
Inhalation: Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.
Notes to Physician: Treat symptomatically.

Section 5 – Fire Fighting Measures

Flash Point: ~32°C
Autoignition Temperature: No information available.
Explosion Limits Upper: No data available
Lower: No data available
Extinguishing Media: Dry Chemical, water, foam, or carbon dioxide. Water can be used to keep fire-exposed containers cool

Unsuitable Extinguishing Media: No information available

Fire & Explosion Hazards: Vapors may explode if ignited in an enclosed area.

Fire Fighting Instructions / Equipment: Poisonous gases are produced in fire. Cool container with water. Do not release runoff into sewers or waterways. Wear protective clothing. Use NIOSH-approved breathing equipment.

Hazardous Combustion Products: No information available

Sensitivity to mechanical impact: No information available.

Sensitivity to static discharge: No information available.

Specific Hazards Arising from the Chemical: No information available

NFPA Rating: (estimated) Health: 2; Flammable: 2; Reactivity: 1

Section 6 – Accidental Release Measures

Personal Precautions: Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

Environmental Precautions: Do not flush to sewer.


Section 7 – Handling and Storage

Handling: Wash hands after handling. Avoid contact with skin and eyes.

Storage: Store in secure flammable storage area away from ignition sources. Protect from freezing and physical damage. May be hazardous since they retain product residue.

Section 8 – Exposure Controls, Personal Protection

Engineering Measures/ General Hygiene: Local/general exhaust is recommended. Ensure eyewash and safety showers are available.

Personal Protection Equipment: Skin Protection: Chemical resistant gloves.

Eye/Face Protection: Safety Glasses or goggles.

Respiratory Protection: Normal ventilation is adequate.

Section 9 – Physical and Chemical Properties

Appearance/Physical State: Dark, Blue Liquid

Odor: Alcohol

Boiling Point: No Information Available

Melting Point: No Information Available

Vapor Density: No Information Available

Evaporation Rate: No Information Available

pH: Not Available

Flammability: No Information Available

Solubility: No Information Available

Relative Density: No Information Available

% Volatility: No Information Available

Specific Gravity: Not Applicable

Vapor Pressure: Not Applicable

Flash Point: Not Applicable

Coefficient of water/oil distribution: Not Available

Odor Threshold: Not Available

Decomposition Temperature: No Information Available

Partition Coefficient n-octanol/water: No data

Molecular Weight: Not Applicable

Section 10 – Stability and Reactivity

Chemical Stability: Stable under normal conditions of use and storage.
**Incompatible Materials:** Oxidizers, aldehydes, heat, sparks, open flame. Will attack some forms of rubber, plastics, and coatings. May react with metallic aluminum and generate hydrogen gas.

**Conditions to Avoid:** None known

**Hazardous Decomposition Products:** Acid and irritating fumes, including toxic oxides of carbon and nitrogen when heated to combustion.

**Hazardous Polymerization:** Does not occur

**Hazardous Reactions:** None under normal processing.

**Section 11 – Toxicological Information**

**Routes of Exposure/Symptoms/Corrosiveness** – See Section 2

LD50 o.rat: 17590 mg/kg (Eriochrome Black T), 4.92mL/kg (Triethanolamine)

LC50 inhalation-rat: Not Available

**Irritation:** No Information Available

**Toxicologically Synergistic:** No Information Available

**Chronic Exposure**

**Carcinogenicity** No Information Available

**Sensitization** No information available.

**Mutagenic Effects** No information available.

**Reproductive Effects** No information available.

**Developmental Effects (Immediate/Delayed)** No information available.

**Teratogenicity** No information available.

**Other Adverse Effects** No Information Available.

**Endocrine Disruptor Information** No information available

**Section 12 – Ecological Information**

**Ecotoxicity:** Not Available.

**Persistence and Degradability:** No Information Available

**Mobility:** No Information Available

**Bioaccumulation/Accumulation:** No Information Available

**Section 13 – Disposal Considerations**

**Waste Disposal/Waste Disposal of Packaging:** Do not flush to sewer. Absorb with inert material and place in chemical waste container for proper disposal in a disposable facility for incineration in a chemical incinerator. Ventilate spill area. Have extinguishing agent available in case of fire. Eliminate all sources of ignition. Use non-sparking equipment. All chemical waster generators must determine whether a discarded chemical is classified as hazardous waste. Comply with all local, state, and federal regulations.

**Section 14 – Transport Information**

**DOT – UN1993, Flammable Liquid, N.O.S., (Ethanol Solution), 3, II**

**Section 15 – Regulatory Information (not meant to be all inclusive)**

**OSHA Status:** These chemicals are considered hazardous by OSHA.

**Canada DSL:** These chemicals are listed on the Canada DSL list.

**TSCA:** The components of this solution are listed on the TSCA Inventory

**SARA Title III Section 313:** Not Applicable

**RCRA Status:** Not Applicable

**CERCLA Reportable Quantity:** Not reported


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

**Section 16 – Additional Information**

**Disclaimer:** The information on this MSDS applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user’s
Material Safety Data Sheet

Section 1 – Chemical Product and Company Identification


Product Identity: EDTA Hardness Reagent

Chemical Family: Not Applicable
Synonyms: Not Applicable
Recommended Use: Laboratory chemicals

Manufacturer’s Name: AquaPhoenix Scientific, Inc., 9 Barnhart Dr., Hanover, PA 17331
Emergency Contact Number (24hr): Chemtel (800) 255-3924

Issue Date: 12/28/06
Revision Date: 07/03/08, 04/14/10, 12/29/10, 02/19/12

Section 2 – Hazard Identification

Emergency Overview
Does not present any significant health hazards. Wash areas of contact with water.

Appearance: Clear, colorless liquid Odor: Odorless
Target Organs: Eyes and skin.
Potential Health Effects/ Routes of Exposure:
Eyes: May cause slight irritation.
Skin: May cause slight irritation.
Ingestion: Large doses may cause upset stomach
Inhalation: Not likely to be a hazard by inhalation.
Chronic Effect / Carcinogenicity: None (IARC, NTP, OSHA)
Aggravated Medical Conditions No information available
These chemicals are not considered hazardous by OSHA.
See section 11 for toxicological information. See section 12 for potential environmental effects.

Section 3 – Composition, Information on Ingredients

EDTA Disodium Dihydrate, CAS# 6381-92-6, <0.3% w/v
Water, purified, CAS# 7732-18-5, >99.7% w/v

Section 4 – First Aid

Eyes: Immediately flush eyes with water for at least 15 minutes. Immediately get medical assistance.
Skin: Flush with water for 15 minutes. Get medical assistance if irritation develops.
Ingestion: Dilute with water or milk. Get medical assistance.
Inhalation: Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.
Notes to Physician Treat symptomatically.

Section 5 – Fire Fighting Measures

Flash Point: Not Applicable Autoignition Temperature No information available.
Explosion Limits Upper: No data available  
Lower: No data available  

Extinguishing Media: Any means suitable for extinguishing fire.  

Unsuitable Extinguishing Media: No information available  

Fire & Explosion Hazards: Not considered to be a fire or explosion hazard.  

Fire Fighting Instructions / Equipment: Use normal procedures. Use protective clothing. Use NIOSH-approved breathing equipment.  

Hazardous Combustion Products: No information available  

Sensitivity to mechanical impact: No information available.  

Sensitivity to static discharge: No information available.  

Specific Hazards Arising from the Chemical: Thermal decomposition can lead to release of irritating gases and vapors  

NFPA Rating: (estimated) Health: 1; Flammable: 0; Reactivity: 0  

Section 6 – Accidental Release Measures  

Personal Precautions: Use proper personal protective equipment. Avoid contact with skin, eyes and clothing.  

Environmental Precautions: Not Applicable  

Methods for Containment and Clean Up: Absorb with suitable material and treat as normal refuse. Small amounts may be flushed with excess water to sewer. Always obey local regulations.  

Section 7 – Handling and Storage  

Handling: Wash hands after handling. Avoid contact with skin and eyes.  

Storage: Protect from freezing and physical damage.  

Section 8 – Exposure Controls, Personal Protection  

EDTA Disodium Dihydrate, CAS# 6381-92-6, ACGIH TLV: NA, OSHA PEL: NA  

Water, purified, CAS# 7732-18-5, ACGIH TLV: NA, OSHA PEL: NA  

Engineering Measures/ General Hygiene: Normal ventilation is adequate. Ensure eyewash and safety showers are available.  

Personal Protection Equipment: Skin Protection: Chemical resistant gloves. Eye/Face Protection: Safety Glasses or goggles. Respiratory Protection: Normal ventilation is adequate.  

Section 9 – Physical and Chemical Properties  

Appearance/Physical State: Clear, colorless liquid  

Odor: Odorless  

Boiling Point: Approx 100C  

Melting Point: Approx 0C  

Vapor Density: >1  

Evaporation Rate: Not available  

pH: 8-10  

Flammability: No Information Available  

Solubility: Infinite  

Relative Density: No Information Available  

% Volatility: No Information Available  

Specific Gravity: Approx 1  

Vapor Pressure: Not Applicable  

Flash Point: Not Applicable  

Coefficient of water/oil distribution: Not Available  

Decomposition Temperature: No Information Available  

Partition Coefficient n-octanol/water: No data  

Molecular Weight: Not available  

Section 10 – Stability and Reactivity  

Chemical Stability: Stable under normal conditions of use and storage.  

Incompatible Materials: Strong oxidizers, copper, aluminum  

Hazardous Decomposition Products: Carbon dioxide, carbon monoxide, nitrogen oxides  

Hazardous Polymerization: Does not occur  

Hazardous Reactions: Not Available  

Section 11 – Toxicological Information
Routes of Exposure/Symptoms/Corrosiveness – See Section 2
LD50 orl-rat: 2000mg/kg (EDTA Disodium Anhydrous) LC50 inhalation-rat: NA

Irritation: No Information Available
Toxicologically Synergistic: No Information Available

Chronic Exposure
Carcinogenicity: There are no known carcinogenic chemicals in this product
Sensitization: No information available.
Mutagenic Effects: No information available.
Reproductive Effects: No information available.
Developmental Effects (Immediate/Delayed): No information available.
Teratogenicity: No information available.
Other Adverse Effects: No information available.
Endocrine Disruptor Information: No information available

Section 12 – Ecological Information

Ecotoxicity: Not applicable
Persistence and Degradability: No Information Available
Bioaccumulation/Accumulation: No Information Available

Section 13 – Disposal Considerations

Waste Disposal/Waste Disposal of Packaging: Dilute with water and flush to sewer.

Section 14 – Transport Information

DOT – Not Regulated

Section 15 – Regulatory Information (not meant to be all inclusive)

OSHA Status: These chemicals are not considered hazardous by OSHA.
Canada DSL: These chemicals are not on Canada’s DSL list.
TSCA: The components of this solution are listed on the TSCA Inventory
SARA Title III Section 313: Not Applicable
RCRA Status: Not Applicable
CERCLA Reportable Quantity: EDTA Disodium Dihydrate – 5000 lb
WHMIS: Not Applicable

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

Section 16 – Additional Information

Disclaimer: The information on this MSDS applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user’s responsibility to determine the suitability and completeness of this information for his own particular use. No warranty is implied regarding the accuracy of the data or the results to be obtained from the products use.
Material Safety Data Sheet

Section 1 – Chemical Product and Company Identification


Product Identity: EDTA Hardness Reagent, Hardness Titrant High

Chemical Family: Not Applicable
Synonyms: Not Applicable
Recommended Use: Laboratory chemicals

Manufacturer’s Name: AquaPhoenix Scientific, Inc., 9 Barnhart Dr., Hanover, PA 17331
Emergency Contact Number (24hr): Chemtel (800) 255-3924

Issue Date: 12/28/06
Revision Date: 07/03/08, 04/14/10, 12/29/10, 02/19/12

Section 2 – Hazard Identification

Emergency Overview
Does not present any significant health hazards. Wash areas of contact with water.

Appearance: Clear, colorless liquid  Odor: Odorless
Target Organs: Eyes and skin.

Potential Health Effects/ Routes of Exposure:
Eyes: May cause slight irritation.
Skin: May cause slight irritation.
Ingestion: Large doses may cause upset stomach
Inhalation: Not likely to be a hazard by inhalation.
Chronic Effect / Carcinogenicity: None (IARC, NTP, OSHA)
Aggravated Medical Conditions No information available
These chemicals are not considered hazardous by OSHA.
See section 11 for toxicological information.  See section 12 for potential environmental effects.

Section 3 – Composition, Information on Ingredients

EDTA Disodium Dihydrate, CAS# 6381-92-6, <3% w/v
Water, purified, CAS# 7732-18-5, >97% w/v

Section 4 – First Aid

Eyes: Immediately flush eyes with water for at least 15 minutes. Immediately get medical assistance.
Skin: Flush with water for 15 minutes. Get medical assistance if irritation develops.
Ingestion: Dilute with water or milk. Get medical assistance.
Inhalation: Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.
Notes to Physician Treat symptomatically.

Section 5 – Fire Fighting Measures

Flash Point: Not Applicable  Autoignition Temperature No information available.
Explosion Limits Upper No data available  Lower No data available
Extinguishing Media: Any means suitable for extinguishing fire.
Unsuitable Extinguishing Media: No information available
Fire & Explosion Hazards: Not considered to be a fire or explosion hazard.
Fire Fighting Instructions / Equipment: Use normal procedures. Use protective clothing. Use NIOSH-approved breathing equipment.

Hazardous Combustion Products: No information Available
Sensitivity to mechanical impact: No information available.
Sensitivity to static discharge: No information available.
Specific Hazards Arising from the Chemical: Thermal decomposition can lead to release of irritating gases and vapors

NFPA Rating: (estimated) Health: 1; Flammable: 0; Reactivity: 0

Section 6 – Accidental Release Measures

Personal Precautions: Use proper personal protective equipment. Avoid contact with skin, eyes and clothing.

Environmental Precautions: Not Applicable

Methods for Containment and Clean Up: Absorb with suitable material and treat as normal refuse. Small amounts may be flushed with excess water to sewer. Always obey local regulations.

Section 7 – Handling and Storage

Handling: Wash hands after handling. Avoid contact with skin and eyes.

Storage: Protect from freezing and physical damage.

Section 8 – Exposure Controls, Personal Protection

EDTA Disodium Dihydrate, CAS# 6381-92-6, ACGIH TLV: NA, OSHA PEL: NA
Water, purified, CAS# 7732-18-5, ACGIH TLV: NA, OSHA PEL: NA

Engineering Measures/ General Hygiene: Normal ventilation is adequate. Ensure eyewash and safety showers are available.

Personal Protection Equipment: Skin Protection: Chemical resistant gloves.
Eye/Face Protection: Safety Glasses or goggles.
Respiratory Protection: Normal ventilation is adequate.

Section 9 – Physical and Chemical Properties

Appearance/Physical State: Clear, colorless liquid

Odor: Odorless

Boiling Point: Approx 100°C

Melting Point: Approx 0°C

Vapor Density: >1

Evaporation Rate: Not available

pH: 8-10

Flammability: No Information Available

Solubility: Infinite

Relative Density: No Information Available

Molecular Weight: Not available

Section 10 – Stability and Reactivity

Chemical Stability: Stable under normal conditions of use and storage.

Incompatible Materials: Strong oxidizers, copper, aluminum

Hazardous Decomposition Products: Carbon dioxide, carbon monoxide, nitrogen oxides

Hazardous Polymerization: Does not occur

Hazardous Reactions: Not Available

Section 11 – Toxicological Information

Routes of Exposure/Symptoms/Corrosiveness – See Section 2

LD50 oral-rat: 2000mg/kg (EDTA Disodium Anhydrous)

LC50 inhalation-rat: NA

Irritation: No Information Available

Toxicologically Synergistic: No Information Available
Chronic Exposure
Carcinogenicity There are no known carcinogenic chemicals in this product
Sensitization No information available.
Mutagenic Effects No information available.
Reproductive Effects No Information available.
Developmental Effects (Immediate/Delayed) No information available.
Teratogenicity No information available.
Other Adverse Effects No information available.
Endocrine Disruptor Information No information available

Section 12 – Ecological Information

Ecotoxicity: Not applicable
Persistence and Degradability: No Information Available Mobility: No Information Available
Bioaccumulation/ Accumulation: No Information Available

Section 13 – Disposal Considerations

Waste Disposal/Waste Disposal of Packaging: Dilute with water and flush to sewer.

Section 14 – Transport Information

DOT – Not Regulated

Section 15 – Regulatory Information (not meant to be all inclusive)

OSHA Status: These chemicals are not considered hazardous by OSHA.
Canada DSL: These chemicals are not on Canada’s DSL list.
TSCA: The components of this solution are listed on the TSCA Inventory
SARA Title III Section 313: Not Applicable
RCRA Status: Not Applicable
CERCLA Reportable Quantity: EDTA Disodium Dihydrate – 5000 lb
WHMIS: Not Applicable
This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

Section 16 – Additional Information

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