

# Bioland Scientific LLC

## Material Safety Data Sheet

Version 1.0  
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### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name **Ethylenediaminetetraacetic acid disodium salt dihydrate**

Product Number CE01  
Brand Bioland Scientific LLC

Company Bioland Scientific LLC  
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Paramount, CA 90723  
USA

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### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: Disodium ethylenediaminetetraacetate dihydrate  
Edetate disodium salt dihydrate  
Edathamil  
EDTA disodium salt

Formula:  $C_{10}H_{14}N_2Na_2O_8 \cdot 2H_2O$   
Molecular Weight: 372.24 g/mol

CAS-No.	EC-No.	Index-No.	%
6381-92-6	205-358-3		99.0%

### 3. HAZARDS IDENTIFICATION

#### Emergency Overview

**OSHA Hazards:** No known OSHA hazards

#### HMIS Classification

**Health Hazard:** 1  
**Flammability:** 1  
**Physical hazards:** 0

#### NFPA Rating

**Health Hazard:** 0  
**Fire:** 1  
**Reactivity Hazard:** 0

#### Potential Health Effects

**Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation.  
**Skin:** May be harmful if absorbed through skin. May cause skin irritation.  
**Eyes:** May cause eye irritation.  
**Ingestion:** May be harmful if swallowed.

#### 4. FIRST AID MEASURES

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled**

Move person into fresh air immediately. If not breathing give artificial respiration.

**In case of skin contact**

Wash off with soap and plenty of water for at least 15 minutes while removing contaminated clothing.

**In case of eye contact**

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water.

#### 5. FIRE-FIGHTING MEASURES

**Flammable properties**

Not flammable or combustible.

**Explosion Limits**

Lower: Not available.

Upper: Not available.

**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for fire-fighters**

Wear self contained breathing apparatus for fire fighting if necessary.

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions**

Use personal protective equipment as indicated in Section 8. Avoid dust formation. Avoid breathing dust.

**Environmental precautions**

Do not let product enter drains.

**Methods for cleaning up**

Vacuum or sweep up material and place into in suitable, closed containers for disposal.

#### 7. HANDLING AND STORAGE

**Handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

**Storage**

Keep container tightly closed in a dry and cool place.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

### Personal protective equipment Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Hand protection

Handle with gloves.

### Eye protection

Safety glasses

### Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form: Solid

Color: white

### Safety data

pH	4.0 - 5.5 at 10 g/l at 23 °C (73 °F)
Meltingpoint/freezing point	
Melting point/range:	248 °C (478 °F)
Boiling point	no data available
Flash point	> 100 °C (> 212 °F) - DIN 51758
Ignition temperature	> 100 °C (> 212 °F)
Autoignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure	no data available
Density no data available	100 g/l at 20 °C (68 °F)
Water solubility ca.	
Partition coefficient:	no data available
n-octanol/water	
Relative vapour density	no data available
Evaporation rate	no data available

## 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable under normal temperatures and pressures

**Conditions to Avoid:** no data available

**Incompatibilities with Other Materials:** Strong oxidizing agents

**Hazardous Decomposition Products:** Carbon oxides, nitrogen oxides (NOx), Sodium oxides

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

**Oral LD50:** rat - > 2,000 mg/kg

**Inhalation LC50:** no data available

**Dermal LD50:** no data available

**Other information on acute toxicity:** no data available

**Skin corrosion/irritation:** Skin - rabbit - No skin irritation - OECD Test Guideline 404

**Serious eye damage/eye irritation:** Eyes - rabbit - No eye irritation - OECD Test Guideline 405

**Respiratory or skin sensitization:** no data available

**Germ cell mutagenicity:** no data available

### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** no data available

**Teratogenicity:** no data available

**Specific target organ toxicity - single exposure (Globally Harmonized System):** no data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System):** no data available

**Aspiration hazard:** no data available

### Potential health effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation.

**Signs and Symptoms of Exposure:** To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Synergistic effects:** no data available

**Additional Information:** RTECS: AH4410000

## 12. ECOLOGICAL INFORMATION

### Toxicity

Toxicity to fish LC50 - *Leuciscus idus* (Golden orfe) - > 500 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates.

EC50 - Daphnia - > 100 mg/l - 24 h

Toxicity to algae EC50 - Algae - 10 - 100 mg/l - 72 h

### Persistence and degradability

Biodegradability Method: Directive 67/548/EEC Annex V, C.4.C.

**Bioaccumulative potential:** no data available

**Mobility in soil:** no data available

**PBT and vPvB assessment:** no data available

**Other adverse effects:**

Chemical Oxygen: 590 mg/g

Demand (COD)

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Toxic to aquatic life.

no data available

### 13. DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

**Contaminated packaging:** Dispose of as unused product.

### 14. TRANSPORT INFORMATION

**DOT (US):** Not dangerous goods

**IMDG:** Not dangerous goods

**IATA:** Not dangerous goods

### 15. REGULATORY INFORMATION

#### OSHA Hazards

No known OSHA hazards

#### SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### SARA 311/312 Hazards

No SARA Hazards

#### Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

#### Pennsylvania Right To Know Components

Edetate disodium dihydrate

CAS-No.: 6381-92-6 Revision Date

#### New Jersey Right To Know Components

Edetate disodium dihydrate

CAS-No.: 6381-92-6 Revision Date

#### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

### **Product Use:**

Laboratory Reagent.

### **Disclaimer:**

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**Bioland Scientific LLC provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. BIOLAND SCIENTIFIC LLC MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, BIOLAND SCIENTIFIC LLC WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.**