

## Safety Data Sheet (SDS)

Ethlenediaminetetraacetic Acid (EDTA)

Issue date 03/01/2007

Reviewed on 10/04/2018

### 1. Identification

- **Product Identifier**
  - Name of the product:** Ethlenediaminetetraacetic acid (EDTA)
  - CAS No:** 60-00-4
- **Details of the Supplier of the Safety Data Sheet:**
- **Manufacturer/Supplier:**
  - Ramsay Browne Chemical & Company
  - PO Box 6425
  - Moraga, CA 94570
  - General Number: (925) 280-1661
- **Emergency telephone number: (925) 280-1661**

### 2. Hazard(s) Identification

#### Emergency Overview

**OSHA Hazards:** Irritant

**GHS Classification:** Eye irritation (Category 2A)

**GHS Label elements, including precautionary statements**



**Pictogram:**

**Signal word:** Warning

#### Hazard statement(s):

H319 – Causes serious eye irritation

#### Precautionary statement(s):

**P305+P351+P338:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

#### HMIS Classification:

**Health hazard:** 2

**Flammability:** 0

**Physical hazards:** 0

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### 2. Hazard(s) Identification (continued)

**NFPA Rating**

**Health hazard:** 2

**Fire:** 0

**Reactivity hazard:** 0

**Potential Health Effects:**

**Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation.

**Skin:** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes:** Causes eye irritation.

**Ingestion:** May be harmful if swallowed.

### 3. Composition / Information on ingredients

**Synonyms:**

Edathamil

(Ethylenedinitrilo)tetraacetic acid

Ethylenedinitrilotetraacetic acid

EDTA

**Formula:** C<sub>10</sub>H<sub>16</sub>N<sub>2</sub>O<sub>8</sub>

**Molecular Weight:** 292.24 b/mol

Component	Concentration
Edetic acid	
<b>CAS No:</b> 60-00-4	90-100%
<b>EX-No:</b> 200-449-4	
<b>Index-No:</b> 607-429-00-8	

### 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:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
- **In case of skin contact:** Wash off with soap and plenty of water. Consult a physician.
- **In case of eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
- **If swallowed:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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### 5. Firefighting Measures

- **Conditions of flammability:** Not flammable or combustible.
- **Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- **Special protective equipment for firefighters:** Wear self contained breathing apparatus for fire fighting if necessary.
- **Hazardous combustion products:** Hazardous decomposition products formed under fire conditions. – Carbon oxides, nitrogen oxides (NO<sub>x</sub>).

### 6. Accidental Release Measures

- **Personal precautions:** Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust.
- **Environmental precautions:** Do not let product enter drains.
- **Methods and materials for containment and cleaning up:** Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 7. Handling and Storage

- **Precautions for safe handling:** Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.
- **Conditions for safe storage:** Keep container tightly closed in a dry and well-ventilated place. Keep in a dry place.

### 8. Exposure Controls / Personal Protection

- **Contains no substances with occupational exposure limit values.**
- **Personal protective equipment:**
- **Respiratory protection:** For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
- **Hand protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
- **Full contact**
- Material: Nitrile rubber
- Minimum layer thickness: 0.11 mm

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### 8. Exposure Controls / Personal Protection (continued)

- Break through time: 480 min
- Material tested: Dermatril ® (KCL 740/Aldrich Z677272, Size M)
- **Splash contact**
- Material: Nitrile rubber
- Minimum layer thickness: 0.11 mm
- Break through time: 480 min
- Material tested: Dermatril ® (KCL 740/Aldrich Z677272, Size M)
- Data source: KCL GmbH, D-36124 Eichenzell, phone +49(0)6659 87300, e-mail sales@kcl.de, test methos: EN374
- If used in solution, or mixed with other substances, and under conditions which differ from EN374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.
- **Eye protection:** Safety glasses with side-shields conforming to EN166 use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
- **Skin and body protection:** Impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- **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

- **Form:** powder
- **Color:** white
- **pH:** 2.5 at 10 g/l at 23°C (73°F)
- **Melting/Freezing point:** Melting point/range - 250°C (482°F) – dec
- **Boiling point:** no data available
- **Flash point:** no data available
- **Ignition temperature:** no data available
- **Auto-ignition temperature:** >400°C (752°F) at 1,013 hPa (760 mmHg)
- **Lower explosion limit:** no data available
- **Upper explosion limit:** no data available

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### 9. Physical and Chemical Properties

- **Vapor pressure:** no data available
- **Density:** 1.46 g/cm<sup>3</sup> at 20°C (68°F)
- **Water solubility:** 0.4 g/l at 20°C (68°F)
- **Partition coefficient (n-octanol/water):** log Pow – 8.85-10.44 at 20°C (68°F)
- **Relative vapor density:** no data available
- **Odor:** odorless
- **Odor Threshold:** no data available
- **Evaporation rate:** no data available

### 10. Stability and Reactivity

- **Chemical stability:** Stable under recommended storage conditions.
- **Possibility of hazardous reactions:** no data available
- **Conditions to avoid:** no data available
- **Materials to avoid:** Strong oxidizing agents.
- **Hazardous decomposition products:** Hazardous decomposition products formed under fire conditions. – Carbon oxides, nitrogen oxides (NO<sub>x</sub>). Other decomposition products- no data available.

### 11. Toxicological Information

- **Acute toxicity:**
- **Oral LD50:** LD50 Oral – rat – male and female – 4,500 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
- **Serious eye damage/eye irritation:** Eyes – rabbit – Eye irritation
- **Respiratory or skin sensitization:** Maximization Test – rabbit – Does not cause skin sensitization.
- **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.

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### 11. Toxicological Information (continued)

- **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. Causes respiratory tract irritation.
  - **Ingestion:** May be harmful if swallowed.
  - **Skin:** May be harmful if absorbed through skin. Causes skin irritation.
  - **Eyes:** Causes 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 – AH4025000

### 12. Ecological Information

- **Toxicity:**
  - **Toxicity to fish:** static test LC50 – *Lepomis macrochirus* (Bluegill sunfish) – 41 mg/l – 96h
  - **Toxicity to daphnia and other aquatic invertebrates:** static test EC50 – *Daphnia magna* (Water flea) – 625 mg/l – 48h
- **Persistence and degradability:**
- **Bioaccumulative potential:**
- **Bioaccumulation:**
  - *Lepomis macrochirus* – 28d
  - Bioconcentration factor (BCF) 1.8

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### 12. Ecological Information (continued)

- **Mobility in soil:** no data available
- **PBT and vPvB assessment:** no data available
- **Other adverse effects:** May be harmful to aquatic organisms due to the shift of the pH. Avoid release to the environment.

### 13. Disposal Considerations

- **Product:** Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
- **Contaminated packaging:** Dispose of as unused product.

### 14. Transport Information

- **DOT (US)**
- **UN Number:** 3077
- **Class:** 9
- **Packaging group:** III
- **Proper shipping name:** Environmentally hazardous substances, solid, n.o.s. (Edetic acid)
- **Reportable Quantity (RQ):** 5,000 lbs
- **Marine pollutant:** No
- **Poison inhalation Hazard:** No
  
- **IMDG:** Not dangerous goods
  
- **IATA:** Not dangerous goods

### 15. Regulatory Information

- **OSHA Hazards:** Irritant
- **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:** Acute Health Hazard
  
- **Massachusetts Right to Know Components:**
- Edetic acid
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### 15. Regulatory Information (continued)

- **Pennsylvania Right to Know Components:**
  - Edetic acid
  - CAS No: 60-00-4
- **New Jersey Right to Know Components:**
  - Edetic acid
  - CAS No: 60-00-4
- **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

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Ramsay Browne Chemical & Co. shall not be held liable for any damage resulting from handling or from contact with the above product.