



Delivering the Right Results

# SAFETY DATA SHEET

## 1. Identification

**Product identifier** EDTA Calibration Sample

### Other means of identification

**SDS number** 01170

**Part Number** 502-092, 502-092-250

**Recommended use** Not available.

**Recommended restrictions** None known.

### Manufacturer/Importer/Supplier/Distributor information

#### Supplier

**Company name** LECO Corporation

**Address** 3000 Lakeview Avenue  
St. Joseph, MI 49085  
United States

**Telephone** 269-983-5531

**Website** www.leco.com

**E-mail** info@leco.com

**Emergency phone number** Chemtrec: 800-424-9300  
Chemtrec Int'l: 703-527-3887

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Serious eye damage/eye irritation Category 2A

**Environmental hazards** Not classified.

**OSHA defined hazards** Not classified.

### Label elements



**Signal word** Warning

**Hazard statement** Causes serious eye irritation.

#### Precautionary statement

**Prevention** Wash thoroughly after handling. Wear eye/face protection.

**Response** If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Storage** Store away from incompatible materials.

**Disposal** Dispose of waste and residues in accordance with local authority requirements.

**Hazard(s) not otherwise classified (HNOC)** None known.

**Supplemental information** None.

## 3. Composition/information on ingredients

### Substances

Chemical name	Common name and synonyms	CAS number	%
Ethylenediamineteraacetic acid		60-00-4	90 - 100

## 4. First-aid measures

**Inhalation** If gas/fume/vapor/dust/mist from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.

<b>Skin contact</b>	Rinse skin with water/shower. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists after washing.
<b>Ingestion</b>	Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.
<b>Most important symptoms/effects, acute and delayed</b>	None known.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire. Water.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use water spray to cool unopened containers.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep upwind. Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear a dust mask if dust is generated above exposure limits.
<b>Methods and materials for containment and cleaning up</b>	Avoid dust formation. Collect dust using a vacuum cleaner equipped with HEPA filter. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Sweep up or vacuum up spillage and collect in suitable container for disposal. Prevent entry into waterways, sewer, basements or confined areas.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with eyes. Wear appropriate personal protective equipment. In case of insufficient ventilation, wear suitable respiratory equipment. Wash hands thoroughly after handling. Avoid release to the environment.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a well-ventilated place. Keep container tightly closed. Guard against dust accumulation of this material. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

<b>Occupational exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits. Ensure adequate ventilation, especially in confined areas.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles). Avoid contact with eyes. Use tight fitting goggles if dust is generated.
<b>Skin protection</b>	
<b>Hand protection</b>	Wear appropriate chemical resistant gloves.
<b>Other</b>	Wear suitable protective clothing.
<b>Respiratory protection</b>	Wear respirator with dust filter.

<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Solid.
<b>Form</b>	Powder.
<b>Color</b>	White
<b>Odor</b>	Odorless.
<b>Odor threshold</b>	Not available.
<b>pH</b>	2.5 estimated for saturated solution
<b>Melting point/freezing point</b>	428 °F (220 °C) (decomposes without melting) estimated / 473 °F (245 °C)
<b>Initial boiling point and boiling range</b>	Not available.
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	0.2 g/l estimated
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Molecular formula</b>	C10-H16-N2-O8
<b>Molecular weight</b>	292.28 g/mol

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents. Metals.
<b>Hazardous decomposition products</b>	Carbon oxides. Nitrogen oxides (NOx).

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	None known.
<b>Inhalation</b>	Inhalation of dusts may cause respiratory irritation.
<b>Skin contact</b>	May be irritating to the skin.
<b>Eye contact</b>	Causes serious eye irritation. Dust in the eyes will cause irritation.

**Symptoms related to the physical, chemical and toxicological characteristics** Not available.

### Information on toxicological effects

#### Acute toxicity

Product	Species	Test Results
Ethylenediaminetetraacetic acid (CAS 60-00-4)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Mouse	30 mg/kg
<i>Other</i>		
LD50	Mouse	250 mg/kg
	Rat	397 mg/kg

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.  
**Serious eye damage/eye irritation** Causes serious eye irritation. Dust in the eyes will cause irritation.

#### Respiratory or skin sensitization

**Respiratory sensitization** Due to lack of data the classification is not possible.

**Skin sensitization** Due to lack of data the classification is not possible.

**Germ cell mutagenicity** Due to lack of data the classification is not possible.

**Carcinogenicity** This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

**Reproductive toxicity** Due to lack of data the classification is not possible.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Due to lack of data the classification is not possible.

## 12. Ecological information

**Ecotoxicity** Components of this product are hazardous to aquatic life.

Product	Species	Test Results	
Ethylenediaminetetraacetic acid (CAS 60-00-4)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea ( <i>Daphnia magna</i> )	113 mg/l, 48 hours
Fish	LC50	Bluegill ( <i>Lepomis macrochirus</i> )	34 - 62 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential** No data available.

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with all applicable regulations. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport information

#### DOT

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

### 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.  
All components are on the U.S. EPA TSCA Inventory List.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Ethylenediamineteraacetic acid (CAS 60-00-4) Listed.

#### SARA 304 Emergency release notification

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

#### SARA 313 (TRI reporting)

Not regulated.

#### Other federal regulations

##### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

##### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Clean Water Act (CWA) Section 112(r) (40 CFR 68.130)** Hazardous substance

**Safe Drinking Water Act (SDWA)** Not regulated.

#### US state regulations

##### US. Massachusetts RTK - Substance List

Ethylenediamineteraacetic acid (CAS 60-00-4)

##### US. New Jersey Worker and Community Right-to-Know Act

Ethylenediamineteraacetic acid (CAS 60-00-4)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Ethylenediamineteraacetic acid (CAS 60-00-4)

**US. Rhode Island RTK**

Ethylenediamineteraacetic acid (CAS 60-00-4)

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**International Inventories**

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

<b>Issue date</b>	04-17-2014
<b>Revision date</b>	06-05-2014
<b>Version #</b>	02
<b>HMIS® ratings</b>	Health: 2 Flammability: 0 Physical hazard: 0
<b>NFPA ratings</b>	Health: 2 Flammability: 0 Instability: 0
<b>Disclaimer</b>	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.