MSDS Number: **E0170** \* \* \* \* \* Effective Date: 10/29/01 \* \* \* \* \* Supercedes: 11/17/99

**MSDS** 

Material Safety Data Sheet

From: Mallinckrodt Baker, Inc. 222 Red School Lane Phillipsburg, NJ 08865





24 Hour Emergency Telephone: 908-859-2151 CHEMTREC: 1-800-424-9300

National Response in Canada

CANUTEC: 613-996-6666

Outside U.S. and Canada Chemtrec: 703-527-3887

NOTE: CHEMTREC, CANUTEC and National Response Gemer emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, tire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

# EDTA DISODIUM SALT

### 1. Product Identification

**Synonyms:** (Ethylenedinitrilo) tetraacetic acid disodium salt; Disodium EDTA; disodium dihydrogen ethylenediaminetetraacetate; disodium edetate; N,N'-1,2-ethanediylbis [N-(carboxymethyl)- glycine],

disodium salt, dihydrate

CAS No.: 139-33-3 (Anhydrous); 6381-92-6 (Dihydrate)

Molecular Weight: 372.24

Chemical Formula: C10H14O8N2Na2.2H2O

**Product Codes:** 

J.T. Baker: 4040, 5835, 8993, 8994, 8995 Mallinckrodt: 1395, 4931, 7565, 7727

# 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
EDTA Disodium Salt	139-33-3	90 - 100%	Yes

# 3. Hazards Identification

**Emergency Overview** 

WARNING! HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT.

#### J.T. Baker SAF-T-DATA<sup>(tm)</sup> Ratings (Provided here for your convenience)

Health Rating: 1 - Slight Flammability Rating: 1 - Slight Reactivity Rating: 0 - None

Contact Rating: 1 - Slight

Lab Protective Equip: GOGGLES; LAB COAT Storage Color Code: Orange (General Storage)

# Potential Health Effects

#### Inhalation:

Mild irritant. Symptoms may include coughing or sneezing.

Ingestion:

Substance has low toxicity by ingestion. Large amounts may cause gastric upset due to osmotic imbalance through the sequestering of metal ions.

**Skin Contact:** 

Mild irritant. Symptoms may include reddening or inflammation on prolonged contact.

**Eye Contact:** 

No adverse effects expected but dust may cause mechanical irritation.

**Chronic Exposure:** 

No adverse health effects expected.

**Aggravation of Pre-existing Conditions:** 

No adverse health effects expected.

### 4. First Aid Measures

#### Inhalation:

Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion:

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

**Skin Contact:** 

Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.

**Eve Contact:** 

Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

## 5. Fire Fighting Measures

Fire:

Not considered to be a fire hazard.

**Explosion:** 

Not considered to be an explosion hazard.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire.

**Special Information:** 

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

### 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

# 7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

# 8. Exposure Controls/Personal Protection

#### **Airborne Exposure Limits:**

- OSHA Permissible Exposure Limit (PEL):

15 mg/m3 total dust, 5 mg/m3 respirable fraction for nuisance dusts.

- ACGIH Threshold Limit Value (TLV):

10 mg/m3 total dust containing no asbestos and < 1% crystalline silica for Particulates Not Otherwise Classified (PNOC).

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

If the exposure limit is exceeded and engineering controls are not feasible, a half facepiece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece particulate respirator (NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

#### **Skin Protection:**

Wear protective gloves and clean body-covering clothing.

**Eye Protection:** 

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

# 9. Physical and Chemical Properties

**Appearance:** White crystals.

Odor:

Odorless.

Solubility:

10 g in 100 g of water.

Density:

No information found.

pH:

No information found.

% Volatiles by volume @ 21C (70F):

0

**Boiling Point:** 

Not applicable.

**Melting Point:** 

252C (486F) Decomposes.

Vapor Density (Air=1):

No information found.

Vapor Pressure (mm Hg):

No information found.

**Evaporation Rate (BuAc=1):** 

No information found.

## 10. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage.

**Hazardous Decomposition Products:** 

Burning may produce carbon monoxide, carbon dioxide, nitrogen oxides.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Oxidizing agents.

**Conditions to Avoid:** 

Incompatibles.

# 11. Toxicological Information

Anhydrous: Oral rat LD50: 2000 mg/kg. Investigated as a mutagen, reproductive effector. Hydrate: Investigated as a mutagen.

## 12. Ecological Information

**Environmental Fate:** 

No information found.

**Environmental Toxicity:** 

No information found.

## 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

# 14. Transport Information

Not regulated.

# 15. Regulatory Information

```
-----\Chemical Inventory Status - Part 1\-----
                                   TSCA EC Japan Australia
 Ingredient
 -----
                                    Yes Yes Yes
 EDTA Disodium Salt (139-33-3)
 -----\Chemical Inventory Status - Part 2\-----
                                        --Canada--
                                   Korea DSL NDSL Phil.
 Ingredient
 ·
                                    Yes Yes No
 EDTA Disodium Salt (139-33-3)
 -----\Federal, State & International Regulations - Part 1\-----
                         -SARA 302- ----SARA 313-----
                                        List Chemical Catg.
                              RQ TPQ
 Ingredient
                                        ____
                                  ____
 EDTA Disodium Salt (139-33-3)
                               No No
                                         No
 -----\Federal, State & International Regulations - Part 2\------
                                       -RCRA- -TSCA-
261.33 8(d)
                               CERCLA
                                       261.33
 Ingredient
                               ____
                                      _____
                                              ____
                                      No
                                              No
 EDTA Disodium Salt (139-33-3)
Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
SARA 311/312: Acute: Yes Chronic: No Fire: No Pressure: No
Reactivity: No (Pure / Solid)
```

Australian Hazchem Code: None allocated.

Poison Schedule: None allocated.

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

## 16. Other Information

NFPA Ratings: Health: 1 Flammability: 0 Reactivity: 0

Label Hazard Warning:

WARNING! HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT.

**Label Precautions:** 

Avoid breathing dust.

Keep container closed.

Use only with adequate ventilation.

Avoid contact with eyes, skin and clothing.

Wash thoroughly after handling.

Label First Aid:

If inhaled, remove to fresh air. Get medical attention for any breathing difficulty. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists. If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person.

**Product Use:** 

Laboratory Reagent.

**Revision Information:** 

MSDS Section(s) changed since last revision of document include: 1, 8.

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**Prepared by:** Environmental Health & Safety Phone Number: (314) 654-1600 (U.S.A.)