

MATERIAL SAFETY DATA SHEET

EDTA Disodium Dihydrate

NPFA

HMIS

Personal Protective Equipment











In Case of Emergency: Call ChemTrac (24 hr): 800-424-9300, 703-527-3887 Call (330)425-2522

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: 20-147, 20-148

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.

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; PROPER GLOVES

Storage Color Code: Green (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.

Eve 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.

Inaestion:

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.

Eye 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:

None established.

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):

For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. 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-face 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.

EDTA Disodium Salt (139-33-3) No No None

12. Ecological Information

Environmental Fate: No information found. Environmental Toxicity:

96 Hr LC50 bluegill: 159 mg/L (Static)

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.

IARC Category

14. Transport Information

Not regulated

15. Regulatory Information

\Chemical Inventory Status - Pa Ingredient		EC	Japan	Australia
EDTA Disodium Salt (139-33-3)	Yes	Yes	Yes	Yes
\Chemical Inventory Status - Part 2\				
Ingredient	Korea	DSL	NDSL	Phil.
	Yes	Yes	No	Yes
\Federal, State & International Regulations - Part 1\				
Ingredient	RQ	TPQ	-	Chemical Catg.
EDTA Disodium Salt (139-33-3)	No	No	No	No
\Federal, State & International Regulations - Part 2\				
Ingredient	CERCL	A	261.33	8(d)
EDTA Disodium Salt (139-33-3)	No		No	No

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: 3, 12.

Status: Accepted Reviewed By: Brady Chung Review Date: 7/23/2009

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