

# ETHYLENE DIAMINE TETRAACETIC ACID (EDTA) 2NA

## MSDS; Material Safety Data Sheet

### 1. Product Identification

Synonyms: (Ethylenedinitrilo) tetra acetic 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: C<sub>10</sub>H<sub>14</sub>O<sub>8</sub>N<sub>2</sub>Na<sub>2</sub>·2H<sub>2</sub>O

### 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent
EDTA Disodium; Edetate Disodium	139-33-3	90 - 100%

### 3. Hazards Identification

Potential Acute Health Effects: EDTA Disodium; Edetate Disodium is slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects:

Carcinogenic Effects: Not available.

Mutagenic Effects: Not available.

Teratogenic Effects: Not available.

Developmental Toxicity: Not available.

Repeated or prolonged exposure is not known to aggravate medical condition.

### 4. First Aid Measures

Inhalation: If EDTA Disodium; Edetate Disodium inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical.

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: EDTA Disodium; Edetate Disodium is 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 face piece operated in the pressure demand or other positive pressure mode.

## 6. Accidental Release Measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to legal authority requirements.

Large Spill: Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to drain.

## 7. Handling and Storage

Keep EDTA Disodium; Edetate Disodium in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Containers of EDTA Disodium; Edetate Disodium 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, glycerin, 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: EDTA Disodium; Edetate Disodium is 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.

## 10. Stability and Reactivity

Stability: EDTA Disodium; Edetate Disodium is 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.

-----\Cancer Lists\-----			
Ingredient Category	---NTP Carcinogen---		IARC
	Known	Anticipated	
EDTA Disodium; Edetate Disodium (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.

## 14. Transport Information

Not regulated.

## 15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----				
Ingredient	TSCA	EC	Japan	Australia
EDTA Disodium Salt (139-33-3)	Yes	Yes		
Yes yes				

-----\Chemical Inventory Status - Part 2\-----				
Ingredient	Korea	--Canada-- DSL		Phil.
EDTA Disodium Salt (139-33-3)	Yes	Yes	No	Yes

-----\Federal, State & International Regulations - Part 1\-----				
Ingredient	-SARA 302- RQ	TPQ	-----SARA 313----- List	Chemical Catg.
EDTA Disodium Salt (139-33-3)	No	No	No	No

-----\Federal, State & International Regulations - Part 2\-----

Ingredient	CERCLA	-RCRA-	-TSCA-
		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:**

## 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 EDTA Disodium; Edetate Disodium 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.

**Disclaimer:**

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**Our company provides this Edetate Disodium MSDS information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This EDTA Disodium; Edetate Disodium MSDS 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.**

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specification

TEST ITEM	STANDARD SPECIFICATIONS	TEST RESULTS
PURITY	99.0%MIN	99.15%
Chloride (Cl)%	0.05%MAX	0.005%
Sulfate(SO4) Content%	0.05%MAX .	0.02%
Iron (Fe )	0.001%MAX	0.0005%
Heavy metal (Pb)	0.001%MAX	0.0004%
FLUIDITY	Good	Good
APPEARANCE	WHITE POWDER	WHITE POWDER