

Safety Data Sheet



Martrex, Inc.

Section 1: Chemical Product and Company Information

Product name: EDTA Zinc-16

Reference Number: n/a

Web: www.martrexinc.com

Supplier/ Further Information: Martrex, Inc.

1107 Hazeltine Blvd,

Phone: 952/933-5000

Suite 535 MD 27,

Toll Free: 800/328-3627

Chaska, Minnesota 55318

FAX: 952/933-1889

EPA Registration Number: n/a

CAS#: 14025-21-9

Chemical Name: Ethylenediaminetetraacetate, Zinc-Disodium Complex

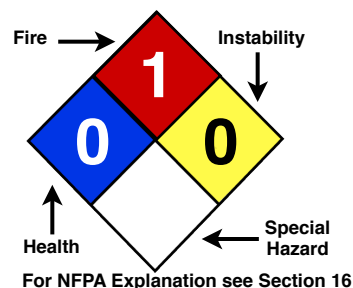
Synonyms: Ethylenediamine-N,N,N,N-tetraacetic acid disodium-zinc salt;

EDTA-ZN-15; Ethylenediaminetetraacetic acid zinc disodium salt hydrate

Chemical Family: Aminocarboxylic Acid Salt

Product Use: n/a

SDS Number: n/a



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Section 2: Hazards Identification

Emergency Overview

Warning! Causes serious eye irritation. May cause skin irritation.

IARC and NTP classified Nitrilotriacetic acid and/or its salts as **Suspect Carcinogens**.

(see Section 11: Toxicological Information)

OSHA Hazards: Irritant

GHS Classification (Global Harmonized Classification see Section 16):

Serious eye damage/eye irritation **Category 2A** (H319)

Carcinogenicity **Category 2** (H351)

(see Section 11: Toxicological Information: Carcinogenicity / Mutagenicity)

GHS Label, Hazards and Precautionary Statements

GHS Pictogram



(GHS Pictogram Hazards Definitions See Section 16)

Label Signal Word: **Warning**

Hazard Statements:

Causes serious eye irritation. (H319)

Suspected of causing cancer. (H351)

Precautionary Statements:

Prevention:

Obtain special instructions before use. (P201)

Do not handle until all safety precautions are read and understood. (P202)

Wash skin thoroughly after handling. (P264)

Wear protective gloves/protective clothing/eye protection/face protection. (P280)

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Response:

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

If eye irritation persists: Get medical advice/ attention. (P337+P313)

If exposed or concerned: Get medical advice / attention. (P308+P313)

Storage:

Store locked up. (P405)

Disposal Considerations:

Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. (P501)

Route(s) of Entry: Inhalation, Ingestion and Dermal.

Potential Health Effects: Nitrotriacetic acid (NTA) and/or its salts are classified by NTP and IARC as suspect carcinogens (Class 2B) based on findings of urinary tract tumors in rats and mice in chronic feeding studies. Based on the doses and exposure conditions required to cause tumors in animals and the low concentration of NTA or its salts present, we don't believe exposure to this product under normal working conditions poses a human cancer risk.

Carcinogenicity (NTP): NTP has listed nitrotriacetic acid (CAS No. 139-13-9) and its salts to cause cancer in experimental animals.

Carcinogenicity (IARC): IARC has classified nitrotriacetic acid and its salts as possibly carcinogenic to humans (group 2B).

Carcinogenicity (OSHA): Under criteria of the OSHA Hazard Communication Standard, nitrotriacetic and its salts would be considered as possibly carcinogenic. Refer to NTP and IARC references.

Section 3: Composition/Information on Ingredients

Component	CAS#	%	OSHA Limits	ACGIH Limits	OTHER Limits
Ethylenediaminetetraacetate, Zinc-Disodium Complex	14025-21-9	90%	no data	no data	no data
Trisodium Nitrotriacetate	5064-31-3	0.20%	no data	no data	no data
Water	7732-18-5	10%	no data	no data	no data

Section 4: First Aid Measures

Ingestion: Give several glasses of water. If vomiting occurs, keep head below hips to reduce risk of aspiration. Give fluids again. **Seek medical attention if health effects occur.**

Eyes: Flush eyes with large quantities of running water for a minimum of 15 minutes. If the victim is wearing contact lenses, remove them. Hold eyelids apart during flushing to ensure rinsing of the entire surface of the eye and lids with water. **DO NOT let victim rub eye(s).** Do not attempt to neutralize with chemical agents. Oils/ointments should not be used at this time. **Get medical attention if eye irritation occurs.**

Skin: Remove contaminated clothing and equipment. Wash all affected areas with soap and water for at least 15 minutes. Do not attempt to neutralize with chemical agents. Wash any contaminated clothing and shoes before reuse. **Obtain medical advice if irritation occurs.**

Inhalation: Remove to fresh air. If breathing becomes difficult, oxygen may be given, preferably with a physician's advice. If not breathing, give artificial respiration. **Get medical attention.**

NOTE TO THE PHYSICIAN: Treat symptomatically and supportively.

Section 5: Fire Fighting Measures

NFPA Hazard Ratings: Health: 0 Fire: 1 Reactivity: 0 Special: N/A (See Section 16 for Explanation)

Flash Point: N/A

Methods Used: N/A

Flammable Limits: N/A

LEL: N/A **UEL:** N/A

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Autolgnition Temp: N/A

Extinguisher Media: This product is non combustible. If involved in a fire, extinguishing media suitable for surrounding materials should be used.

Special Fire Fighting Procedures: As in any fire, prevent human exposure to fire, smoke, fumes or products of combustion. Evacuate non essential personnel from the fire area. Firefighters should wear full-face, self contained breathing apparatus and impervious protective clothing.

Unusual Fire and Explosion Hazards: Not considered a fire hazard. When involved in a fire, does not contribute any unusual hazards.

Hazardous Combustion Products: Oxides of carbon and nitrogen are produced by the combustion of this product.

Emergency Response Guidebook Information: None

Special Fire Fighting Information: Wear appropriate personal protective equipment as specified in Section 8.

Hazardous Combustion Products: See **Section 10 Reactivity** Incompatibilities.

Section 6: Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled: Stop source of spill. Sweep up spilled solid material, being careful not to create dust. Return sweepings to stock or, if contaminated, place into a chemical waste container for disposal.

RCRA Hazard Class: Refer to Section 15: Regulatory Information for RCRA status.

Section 7: Handling and Storage

Handling and Storage: NOTICE: Contains nitrilotriacetic acid or its salt as by-product, which has been found to cause cancer in test animals. In accordance with good industrial practice, handle with due care and avoid unnecessary personal contact. Keep container closed. Isolate from strong oxidizing agents.

Hygienic Work Practices: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Section 8: Exposure Controls / Personal Protection

Respiratory Protection: If handling operations lead to dusting, wear a NIOSH approved half mask, air purifying respiratory with dust, mist and fume filters. When using respirator cartridges or canisters, they must be changed frequently (following each use of at the end of the work shift) to assure breakthrough exposure does not occur.

Skin Protection: Skin contact should be prevented through use of suitable protective clothing, gloves and footwear, selected with regard for use conditions and exposure potential. Consideration must be given both to durability as well as permeation resistance.

Eye Protection: Eye/face protection requirements vary depending upon work environment conditions and material handling practice. Appropriate ANSI Z87 approved equipment should be used for the particular use intended for this material. Use chemical safety glasses with side shields or splash proof goggles and face shield to prevent eye/face contact.

Other Protection: Washing facilities should be available. Wear appropriate equipment to prevent probability of exposure and personal contact.

Ventilation Protection: Local exhaust recommended, mechanical exhaust acceptable.

Exposure Limits: Not established.

Hygienic Work Practices: Handle in accordance with good industrial hygiene and safety practice. Minimize breathing dust. Avoid prolonged or repeated breathing of dust and contact with skin. Remove contaminated clothing; launder before reuse. Cleanse skin thoroughly after contact, before meals and end of work period.

Section 9: Physical and Chemical Properties

Chemical Name: Iron monosodium ethylenediaminetetraacetate

Physical State: Solid

Appearance: white Crystalline Powder

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Odor: odorless
Boiling Point: no data
Freezing/Melting Point: no data
Specific Gravity/Density: 0.65 gr/cm³
Vapor Pressure (mm/Hg): no data
Reactivity in Water: none
Solubility in Water: 1000 gr/ltr (at 20°C)
Molecular Formula: C₁₀H₁₂N₂O₈ZnNa₂
Molecular Weight: 453.6

Section 10: Stability and Reactivity

Stability: This product is stable at ambient temperatures and atmospheric pressures. It is not self reactive and is not sensitive to physical impact.

Conditions to Avoid: Contact with strong oxidizers and prolonged storage at elevated temperatures should be avoided.

Incompatible Materials: Aqueous solution in contact with aluminum evolves hydrogen. Avoid contact with aluminum, copper, copper alloys and nickel. This product is incompatible with strong oxidizers.

Hazardous Decomposition Products: Decomposition products are carbon dioxide, carbon monoxide, nitrogen oxides and water vapor.

Polymerization Conditions to Avoid: Hazardous polymerization is not expected to occur.

Section 11: Toxicological Information

Eye Effects: (Rabbits) not an irritant. It is expected that this product would be minimally irritating to eyes based on tests with similar products.

Skin Effects: Chronic dermal exposure effects for this product are not known.

Dermal Toxicity: Dermal toxicity data is not available for this product. However, it is not considered to be irritating based on tests with chemically similar products.

Sensitization: Not evaluated.

Ingestion Effects: (Rats) LD₅₀>5,000 mg/kg

Carcinogenicity / Mutagenicity: Nitrilotriacetic acid (NTA) and its salts were determined to be "possibly carcinogenic to humans" (Group 2B), by the International Agency for Research on Cancer (IARC) and a compound which "May reasonably be anticipated to be a carcinogen" by the (NTP).

Reproductive Effects: EDTA and its sodium salts have been reported to cause birth defects in lab animals only at exaggerated doses that were toxic to mother. Effects are associated with zinc deficiency due to chelation. Exposures having no effect on mother should have no effect on fetus.

Neurotoxicity: The neurotoxic effects of this product are not known.

Target Organs: Target organ effects of this materials are not available.

Additional Toxicological Information: None.

Section 12: Ecological Information

Biodegradability: Not evaluated

Ecotoxicity: Bluegill LC50 > 1,000 mg/l (96 HR)

Biological Oxygen Demand (BOD5): 0.01 g/g

ADDITIONAL ECOLOGICAL INFORMATION: The Zinc compound in this product is subject to SARA Title III, Section 313 supplier notification/release reporting requirements under the Zinc compound categories.

This product contains approximately 15% Zinc.

Section 13: Disposal Considerations

Waste Disposal Methods: In its unused condition, this product is not considered to be a RCRA defined hazardous waste by characteristics or listings. It is the responsibility of the waste generator to evaluate

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whether his wastes are hazardous by characteristics or listing. Dispose in accordance with all local, state and federal regulations.

Container Disposal Information: Containers should be cleaned of residual product before disposal. Empty containers should be disposed of in accordance with al applicable laws and regulations.

Section 14: Transport Information

	US DOT	Canada TDG	Other
Shipping Name:	Zinc EDTA Chelate	no data	
Hazard Class:	Not regulated by DOT		
Label Requirement:	none		
Placard:	none		
Packing Group:	no data		
RQ:	no data		
CAS#	14025-21-9		

Section 15: Regulatory Information

State Right to Know Laws: The following ingredients are disclosed for compliance with State Right to Know Laws:

CAS#:

14025-21-9

Chemical Name: Sodium Zinc EDTA Zincate(2-),N, N1-1, 2-ethanediybis (N-Carboxymethyl)glycinato (4-) - N,N1,0,01,0N,ON1) -disodium (OC-6-21).

State RTK:

Non-hazard

SARA 311/312: Immediate (Acute) hazard/Delayed (chronic) health hazard

OSHA Status: This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910, 1200.

SECTION 302 - Extremely Hazardous Substances: This product does not contain ingredients listed in Appendix A and B as Extremely Hazardous substances.

TSCA Status: The chemical ingredients in this product are on the 8(b) Inventory List (40 CFR 710).

SARA Section 313: See Below

CAS#:

14025-21-9

Chemical Name: Sodium Zinc EDTA/Zincate (2-), N, N1-1, 2-ethanediyvis (N-(carboxymethyl) glycinato) (4-)-N,N1,0,01,0N,ON1)-disodium (OC-6-21).

CERCLA, 40 CFR 117,302: This product does not contain ingredients specified in the List of Extremely Hazardous Substances.

CERCLA Listed Substanced Are: None

SARA Superfund Section 110: This product does not contain ingredients listed as hazardous substances on the Priority List of CERCLA Hazardous substances.

California Proposition 65: Not listed

Michigan Critical Materials: This product does not contain ingredients listed on the Michigan Critical Materials Register.

CAA: None known

CWA: None known

RCRA: Not a hazardous waste under RCRA (40 CFR 261)

Canada CEPA: All components are listed on the Canadian DSL

Canada WHMIS: Controlled product, Class D2

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Section 16: Other Information

Acronyms

ACGIH - American Conference of Governmental Industrial Hygienists
ANSI - American National Standards Institute
CAS - Chemical Abstracts Service
CERCLA - Comprehensive Environmental Response, Compensation & Liability Act of 1980
CFR - Code of Federal Regulations
CHEMTREC - Chemical Transportation Center
CPR - Controlled Products Regulations
CWC - Chemical Weapons Convention
DOT - U.S. Department of Transportation
DSL - Canadian Domestic Substance List
EHS - Extremely Hazardous Substance
EPA - U.S. Environmental Protection Agency
HMIS - Hazardous Material Identification System
IARC - International Agency for Research on Cancer
LEL/UEL - Lower and Upper Explosive Limit
mg/m³ - Milligrams per cubic meter
NAERG - North American Emergency Response Guidebook
NIOSH - National Institute of Occupational Safety and Health
NFPA - National Fire Protection Association
NTP - National Toxicology Program
OSHA - Occupational Safety and Health Administration
PEL - Permissible Exposure Limit (set by OSHA)
PPE - Personal Protective Equipment
RCRA - Resource Conservation and Recovery Act of 1976
SARA - Superfund Amendments and Reauthorization Act
SDS - Safety Data Sheet
STEL - Concentration to which workers can be exposed continuously for a **short** period of time without suffering from irritation, irreversible tissue -- damage or narcosis of sufficient

GHS Pictograms and Hazards

<p>Health Hazard</p>  <ul style="list-style-type: none"> • Carcinogen • Mutagenicity • Reproductive Toxicity • Respiratory Sensitizer • Target Organ Toxicity • Aspiration Toxicity 	<p>Flame</p>  <ul style="list-style-type: none"> • Flammables • Pyrophorics • Self-Heating • Emits Flammable Gas • Self-Reactives • Organic Peroxides 	<p>Exclamation Mark</p>  <ul style="list-style-type: none"> • Irritant (skin and eye) • Skin Sensitizer • Acute Toxicity (harmful) • Narcotic Effects • Respiratory Tract Irritant • Hazardous to the Environment (Non-Mandatory)
<p>Gas Cylinder</p>  <ul style="list-style-type: none"> • Gases Under Pressure 	<p>Corrosion</p>  <ul style="list-style-type: none"> • Skin Corrosion/ Burns • Eye Damage • Corrosive to Metals 	<p>Exploding Bomb</p>  <ul style="list-style-type: none"> • Explosives • Self-Reactives • Organic Peroxides
<p>Flame Over Circle</p>  <ul style="list-style-type: none"> • Oxidizers 	<p>Environment (Non-Mandatory)</p>  <ul style="list-style-type: none"> • Aquatic Toxicity 	<p>Skull and Crossbones</p>  <ul style="list-style-type: none"> • Acute Toxicity (fatal or toxic)

NFPA Rating Explanation Guide

Rating Number	Health Hazard	Flammability Hazard	Instability Hazard	Rating Symbol	Special Hazard
4	Can be lethal	Will vaporize and readily burn at normal temperatures	May explode at normal temperatures and pressures	ALK	Alkaline
3	Can cause serious or permanent injury	Can be ignited under almost all ambient temperatures	May explode at high temperature or shock	ACID	Acidic
2	Can cause temporary incapacitation or residual injury	Must be heated or high ambient temperature to burn	Violent chemical change at high temperatures or pressures	BIO	BioHazard
1	Can cause significant irritation	Must be preheated before ignition can occur	Normally stable. High temperatures make unstable	COR	Strong Corrosive
0	No Hazard	Will not burn	Stable	CRYO	Cryogenic
				OXY	Oxidizer
				☢	Radioactive
				W	Reacts violently or explosively with water
				W- OX	Reacts violently or explosively with water or oxidizer

This chart for reference only - For complete specifications consult the NFPA Standard

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degree to increase the likelihood of accidental injury, impair self-rescue or materially reduce work efficiency.

TDG (Canadian): Transport of Dangerous Goods Regulations

TLV - Threshold Limit Value (set by ACGIH)

TWA - 8-hour Time Weighted Average

TSCA - US Toxic Substance Control Act

WHMIS - Workplace Hazardous Material Information System

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