

# SAFETY DATA SHEET

Date Printed: 04/28/2024

Date Revised: 01/15/2022

## SECTION 1. IDENTIFICATION

**Product Identifier:** (3N) 99.9% Erbium Nitrate

**Product Code:** ER-NAT-03

**CAS Number:** 10168-80-6

**Relevant identified uses of the substance:** Scientific research and development

Supplier details:

American Elements  
10884 Weyburn Ave.  
Los Angeles, CA 90024  
Tel: +1 310-208-0551  
Fax: +1 310-208-0351  
Emergency telephone number:  
+1 800-424-9300

## SECTION 2. HAZARDS IDENTIFICATION

Statements of Hazard: Irritant, Oxidizer

Acute Health Hazard: Irritant to eyes, skin, mucous membranes and respiratory system. May be harmful by ingestion, inhalation or skin absorption.

Chronic Health Hazard: Not Available

HMIS Rating: H:0 F:0 P:1

NFPA Rating: H:0 F:0 R:1

To the best of our knowledge, the toxicological properties of this chemical have not been thoroughly investigated. Use appropriate procedures and precautions to prevent or minimize exposure.



Pictogram:

Signal Word: Danger

Hazard Statement(s): H272 May intensify fire; oxidizer.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

Precautionary Statement(s): P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P220 Keep/Store away from clothing/combustible materials.

P221 Take any precaution to avoid mixing with combustibles

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

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

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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

P332+P313 If skin irritation occurs: Get medical advice/ attention.

---

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name: Erbium nitrate

Synonyms: Not Available

CAS Number: 10168-80-6

MDL Number: MFCD00149691

EINECS Number: Not Available

Belstein Registry Number: Not Available

Molecular Formula:  $\text{Er}(\text{NO}_3)_3 \cdot 5\text{H}_2\text{O}$

Molecular Weight: 443.35

Content: 99%

Notes: Not Available

---

## SECTION 4. FIRST AID MEASURES

Eye Contact: Flush eyes with large amounts of water for fifteen minutes. Separate eyelids with fingers. If irritation persists, seek medical attention.

Skin Contact: Wash skin with soap and water. If irritation persists, seek medical attention.

Ingestion: Do not induce vomiting. Seek medical attention.

Inhalation: Move to a fresh air environment. Contact a physician if breathing becomes difficult.

---

## **SECTION 5. FIREFIGHTING MEASURES**

Flash Point: Not Available

Explosion Limits: Lower: Not Available

Upper: Not Available

Autoignition: Not Available

Extinguishing Media: Carbon dioxide, dry chemical powder, alcoholresistant foam or water spray.

Protective Equipment: Wear self-contained respirator and fully protective impervious suit.

Specific Hazards: May emit hazardous fumes under fire conditions. May intensify fire.

---

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal Protection: Wear a self-contained breathing apparatus, rubber boots and gloves, and disposable coveralls. Dispose of coveralls after use.

Keep unprotected persons away.

Environmental Protection: Keep spills out of sewers and bodies of water. Dike and contain the spill with inert material. Absorb on sand, vermiculite or diatomite. Transfer material to a container for disposal or recovery. Ventilate area and wash spill site after material pickup is complete.

---

## **SECTION 7. HANDLING AND STORAGE**

Handling: Avoid breathing dust, vapor, mist or gas. Avoid contact with skin and eyes. Avoid prolonged or repeated exposure. Use only in a chemical fume hood. Open and handle container with care. Keep ignition sources away.

Storage: Store in a tightly closed container in a dry, wellventilated place. Store away from reducing agents and organic materials.

Sensitivities: Not Available

Storage Temperature: 15 – 30 °C

---

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Eyes: Wear appropriate protective eyeglass or chemical safety goggles. Make sure that there is an eyewash facility in your vicinity.

Skin: Wear impervious gloves and protective clothing.

Respiratory: Use a NIOSH approved respirator when exposure limits are exceeded or if irritation or other symptoms are experienced.

Exposure Limits: Country Source Type Value

USA ACGIH TWA Not Available

USA OSHA STEL Not Available

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Solid  
Odor: Not Available  
Melting Point: Not Available  
Boiling Point: Not Available  
pH Value: Not Available  
Density: Not Available  
Refractive Index, n<sub>20</sub>  
D: Not Available  
Viscosity: Not Available  
Solubility in Water: Soluble  
Vapor Pressure: Not Available  
Vapor Density(Air=1): Not Available

---

## SECTION 10. STABILITY AND REACTIVITY

Stability: Stable under normal temperatures and pressures.  
Incompatibility: Strong reducing agents, Organic materials.  
Conditions to Avoid: Heat, Flame, Sparks, Other ignition sources  
Hazardous Decomposition Products: Erbium oxides, Nitrogen oxides

---

## SECTION 11. TOXICOLOGICAL INFORMATION

RTECS Reference: Not Available  
Target Organs: Not Available  
Toxicity Data: Not Available  
Skin corrosion/irritation: Not Available  
Serious eye damage/irritation: Not Available  
Carcinogenicity: Not Available

---

## SECTION 12. ECOLOGICAL INFORMATION

Toxicity: Not Available  
Persistence and degradability: Not Available  
Bioaccumulative potential: Not Available  
Mobility in soil: Not Available  
PBT and vPvB assessment: Not Available  
Other adverse effects: Not Available

---

## SECTION 13. DISPOSAL CONSIDERATIONS

Contact a licensed professional waste disposal service. Dispose in a manner consistent with federal, state and local environmental regulations.

---

## SECTION 14. TRANSPORT INFORMATION

DOT Shipping Name: Nitrates, Inorganic, N.O.S.  
DOT UN Number: UN1477  
DOT Hazard Class: Class 5.1  
DOT Packing Group: II  
IMDG Shipping Name: Nitrates, Inorganic, N.O.S.  
IMDG UN Number: UN1477  
IMDG Hazard Class: Class 5.1  
IMDG Packing Group: II  
IATA Shipping Name: Nitrates, Inorganic, N.O.S.  
IATA UN Number: UN1477  
IATA Hazard Class: Class 5.1  
IATA Packing Group: II

---

## SECTION 15. REGULATORY INFORMATION

United States:  
Toxic Substance Control Act (TSCA): Listed  
Superfund Amendments and Reauthorization Act (SARA 302): Not listed  
Superfund Amendments and Reauthorization Act (SARA 311/312): Listed  
Superfund Amendments and Reauthorization Act (SARA 313): Not listed  
European Union:  
European Inventory of Existing Chemical Substances (EINECS): Not Available  
Hazard Codes: O, Xi  
Risk Statements: 8-41  
Safety Statements: 17-26-39  
Canada  
Canadian Domestic Substances List (DSL): Not listed  
Canadian Domestic Substances List (NDSL): Not listed

---

## 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.