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SAFETY DATA SHEET

Section 1. Identification

Neodymium(III) chloride **Product Name:**

Solid **Product Type:**

10024-93-8 **CAS Number: Product Number:** ND4938

Recommended Use: Laboratory chemicals, synthesis of substances.

Product Manufacturer: Ereztech LLC

11555 Medlock Bridge Road, Suite 100

Johns Creek, GA 30097

Product Information: (888) 658-1221

In Case of an Emergency: CHEMTREC: 1-800-424-9300 (USA);

> +1 703-527-3887 (International); CCN836180 *** Contact manufacturer for all non-emergency calls.

Section 2. Hazards Identification

Appearance/Odor: Bluish-pink powder, odor not determined.

Classification: SKIN CORROSION/IRRITATION - Category 2, H315

SERIOUS EYE DAMAGE/IRRITATION – Category 2A, H319

SPECIFIC ORGAN TOXICITY, SINGLE EXPOSURE; RESPIRATORY

TRACT IRRITATION - Category 3, H335

GHS Label Elements

Hazard Pictograms:



Signal Word: WARNING

Hazard Statements: H315: Causes skin irritation.

> H319: Causes serious eye irritation. H335: May cause respiratory irritation.

Precautionary Statements

Prevention: P261: Avoid breathing dusts/aerosols/vapors/gases.

P264 + P265: Wash hands and exposed skin thoroughly after

handling. Do not touch eyes.

Section 2. Hazards Identification

Prevention (cont.): P271: Use only outdoors or with adequate ventilation.

P280: Wear protective gloves/protective clothing/eye protection/

face protection.

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

P304 + P340: IF INHALED: Remove person to fresh air and keep

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.

P319: Get medical help you feel unwell.

P332 + P317: If skin irritation occurs: Get medical help. P337 + P317: If eye irritation persists: Get medical help.

P362 + P364: Take off contaminated clothing and wash it before

reuse.

P403 + P233: Store in a well ventilated place. Keep container Storage:

tightly closed.

P405: Store locked up.

Disposal: P501: Dispose of contents/container in accordance with federal,

state and local regulations.

General: None.

OSHA/HCS Status: This material is considered hazardous by the OSHA Hazard

Communication Standard (29 CFR 1910.1200).

None identified.

Hazards Not Otherwise Classified (HNOC):

Section 3. Composition/Information on Ingredients

Mono-constituent. **Substance Type:**

Synonyms: Neodymium trichloride; Neodymium chloride; Trichloroneodymium.

Formula: NdCl₃ 250.60 Molecular Weight: 233-031-5 EC-No.:

Component Name	%	CAS Number
Neodymium(III) chloride	≥ 98	10024-93-8

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First Aid Measures

Description of Necessary First Aid Measures

General Advice: Move out of dangerous area. If unconscious, place in recovery position and get

medical help immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical help if symptoms develop or if you feel unwell. Show this safety data sheet to the doctor in attendance.

Eye Contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and

lower eyelids. Check for and remove any contact lenses if easy to do. Continue

rinsing. Get medical help if eye irritation develops and persists.

Skin Contact: Take off contaminated clothing and shoes immediately. Wash off contaminated

skin with plenty of water. Get medical help if irritation develops and persists, if

symptoms develop or if you feel unwell.

Inhalation: Remove person to fresh air and keep comfortable for breathing. If not

breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person

providing aid to give mouth-to-mouth resuscitation. Get medical help if

symptoms develop or if you feel unwell.

Ingestion: Rinse mouth. Do NOT induce vomiting. Remove dentures if any. If vomiting

occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Get medical help if

symptoms develop or if you feel unwell.

Most Important Symptoms/Effects, Acute And Delayed Potential Acute Health Effects

Eye Contact: Symptoms may include stinging, tearing, redness, swelling and blurred vision.

Inhalation: May be irritating to respiratory system. Symptoms may include coughing, sore

throat, nausea, headache, vomiting.

Skin Contact: Symptoms may include an itching or burning sensation, reddening, swelling and

blistering with tissue necrosis.

Ingestion: Product is may be expected to be irritating to mucous membranes. Symptoms

may include cramping, localized pain, headache, nausea and vomiting.

Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary

Notes to Physician: Treat symptomatically.

Specific Treatments: No specific treatment.

Protection of First Responders: No action taken shall be taken involving any personal risk

without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See Toxicological Information (Section 11)

Section 5. Fire Fighting Measures

No additional information available. **General Hazards:**

Suitable Extinguishing Media: Use extinguishing measures and media that are appropriate to

the local circumstances and the surrounding environment.

None identified. **Unsuitable Extinguishing Media:**

Unusual Fire and Explosion

Hazards:

Product is not flammable.

Product of Combustion: Compounds formed under fire conditions include hydrogen

> chloride gas and neodymium oxide fumes. Irritating fumes may be generated during exposure to elevated temperatures or

open flame.

Promptly isolate the scene by removing all persons from the **Protection of Firefighters:**

> vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Avoid contact with skin or eyes. Avoid the formation and

inhalation of dusts, aerosols, vapors and gases.

Fire-fighters should wear appropriate protection equipment and

self-contained breathing apparatus (SCBA) with a full face-

piece operated in a positive pressure mode.

Additional Information: Prevent fire extinguishing water from contaminating surface

waters or ground water systems.

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

No action shall be taken involving any personal risk or without For Non-Emergency Personnel:

suitable training. Evacuate surrounding areas. Keep

unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid the formation and inhalation of dusts, aerosols, vapors and gases. Provide adequate ventilation. Wear respiratory protection. Put on appropriate personal protective equipment. Avoid contact with

skin, eyes and clothing.

If specialized clothing is required to deal with the spillage, take For Emergency Responders:

> note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For Non-Emergency

Personnel".

Environmental Precautions: Do not allow dispersal of spilled material and contact with

> waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers,

waterways or air).

Section 6. Accidental Release Measures

Methods for Containment

General: Move containers from spill area if safe to do so. Avoid the

formation and inhalation of dusts, aerosols, vapors and gases. Dispose of collected spillage in accordance with federal, state and local regulations. Contaminated binding material may pose

the same hazard as the spilled product.

Small Spill: Collect spillage with a dry, binding material (e.g. dry sand,

vermiculite or diatomaceous earth) and place in dry, sealed

container for disposal.

Large Spill: Approach release from upwind. Prevent entry into sewers,

water courses, basements or confined areas. Contain and collect spillage with a dry, binding material (e.g. dry sand, vermiculite or diatomaceous earth) and place in dry, sealed

container for disposal.

Note: see Section 1 for emergency contact information and

Section 13 for waste disposal.

Section 7. Handling and Storage

Precautions: Product is hygroscopic; handle under a dry, inert gas. Nitrogen

with less than 5 ppm each of moisture and oxygen is recommended. Avoid formation and inhalation of dusts, aerosols, vapors and gases. Keep container tightly sealed.

Avoid contact with skin, eyes and clothing. Do not ingest. Avoid prolonged exposure. Ensure adequate ventilation.

Protective Measures: Put on appropriate personal protective equipment (see Section

8). Keep in the original container kept tightly closed when not in use. Empty containers retain product residue and can be

hazardous. Do not reuse container.

General Occupational Hygiene: Eating, drinking and smoking should be prohibited in areas

where this material is handled, stored and processed. Workers

should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective

equipment before entering eating areas. See also Section 8 for

additional information on hygiene measures.

Safe Storage Conditions: Product is hygroscopic; store under an inert gas. Nitrogen with

less than 5 ppm each of moisture and oxygen is recommended. Store in original container protected from direct sunlight in a dry and well-ventilated area, away from incompatible materials

and food and drink.

Section 7. Handling and Storage

Safe Storage Conditions (cont.): Keep container tightly closed and sealed until ready for use.

Store locked up.

Section 8. Exposure Controls/Personal Protection

Introductory Remarks: These recommendations provide general guidance for

> handling this product. Because work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and conduct regular repairs. Waste from these

procedures should be handled in accordance with Section 13.

Product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the

region-specific regulatory bodies.

Engineering Controls: Properly operating chemical fume hood designed for

hazardous chemicals and having an average face velocity of at least 100 feet per minute. Provide an eyewash/shower

station.

Environmental Exposure Controls: Emissions from ventilation or work process equipment should

> be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process

equipment will be necessary to reduce emissions to

acceptable levels.

Individual Protection Measures

Occupational Exposure Limits:

Hygiene Measures: Avoid all unnecessary exposure. Wash all exposed skin

> (hands, forearms and face) thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Remove all soiled and contaminated clothing immediately. Do not allow contaminated clothing to leave the workplace. Do not inhale dusts, aerosols, vapors or gases. Avoid contact with eyes and

skin. Ensure that eyewash stations and safety showers are

close to the workstation location.

Safety eyewear complying with an approved standard should **Eye/Face Protection:**

be used when a risk assessment indicates this is necessary to

avoid exposure to dusts and aerosols.

Exposure Controls/Personal Protection Section 8.

Eye/Face Protection:

If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles, faceshield (8-inch minimum). Refer to 29 CFR 1910.133, ANSI Z87.1, or European Standard EN166.

Skin Protection Hand Protection:

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: Chemicalresistant gloves.

Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. For full contact, wear Neoprene or nitrile rubber gloves.

Other Skin Protection:

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory Protection:

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Section 9. Physical and Chemical Properties

Powder. **Physical State:** Bluish-pink. Color:

Ereztech ND4938 Page 7 of 14 Revision: 1.20

Section 9. Physical and Chemical Properties

No data available. Odor: **Odor Threshold:** No data available. No data available. :Ha

784°C (1443 °F). **Melting Point: Boiling Point:** 1600°C (2912 °F).

Product is not flammable. Flash Point: 4.134 g/cm³ @ 25°C (77 °F). **Relative Density:**

Vapor Pressure: No data available. No data available. Vapor Density:

1 kg @ 25 °C (77 °F) - lit. Water Solubility:

Section 10. Stability and Reactivity

Reactivity: Based on available data, no reactivity hazard has been

identified.

This product is stable when stored under a dry, inert **Chemical Stability:** atmosphere and away from heat. Nitrogen containing less than 5 ppm each moisture and air is recommended.

Conditions to Avoid: Exposure to water/moisture.

Strong oxidizing agents, finely powdered metals. **Incompatible Materials:**

Under normal conditions of storage and use, hazardous **Hazardous Decomposition Products:**

decomposition products should not be produced.

Hazardous decomposition products formed under fire conditions: hydrogen chloride gas and neodymium oxides.

In the event of a fire: see Section 5.

Possibility of Hazardous Reactions: Under normal conditions of storage and use noted above,

hazardous reactions will not occur. Hazardous reactions or instability may occur under certain conditions of

storage or use.

Section 11. Toxicological Information

Information on Toxicological Effects

Acute Toxicity

Product/Ingredient Name	Result	Species	Dose	Exposure
Neodymium(III) chloride	LD50 Oral	Mouse	3,692 mg/kg	-

Skin – Rabbit. Result: mild skin irritation, 24 hrs. Irritation/Corrosion:

Sensitization: No specific data available.

Section 11. Toxicological Information

No specific data available. Germ Cell Mutagenicity:

Carcinogenicity

ACGIH No component of this product present at levels greater

than 0.1% is identified as probable, possible or

confirmed human carcinogen by ACGIH.

IARC No component of this product present at levels greater

than 0.1% is identified as probable, possible or

confirmed human carcinogen by IARC.

NTP No component of this product present at levels greater

than 0.1% is identified as probable, possible or

confirmed human carcinogen by NTP.

OSHA No component of this product present at levels greater

than 0.1% is identified as probable, possible or

confirmed human carcinogen by OSHA.

Reproductive Toxicity:

Teratogenicity:

Specific Target Organ Toxicity:

(Single Exposure)

Specific Target Organ Toxicity:

(Repeated Exposure)

Aspiration Hazard:

Information on the Likely

Routes of Exposure:

No specific data available.

Respiratory tract irritation.

No specific data available. No specific data available.

No specific data available.

Common routes of exposure: inhalation (failure to prevent dust formation), dermal (failure to use skin

protection), eye (failure to use safety eyewear). Less common: ingestion (failure to employ recommended hygiene measures (e.g. smoking after handling product

without washing hands or using hand protection).

Additional Information: To the best of our knowledge, the chemical, physical

and toxicological properties of this product have not

been thoroughly investigated.

Section 12. Ecological Information

Product may cause long-term adverse effects in the **Ecotoxicity:**

aquatic environment if discharged in large quantities.

Numerical Measures of Toxicity: No specific data available.

Persistence and Degradability

Not applicable as product does not contain any organic **Biodegradability:**

content.

Section 12. Ecological Information

Bioaccumulative Potential: No specific data available.

Mobility in Soil: Product is likely to be mobile in the environment based

on its water solubility.

Results of PBT and vPvB Assessment: PBT/vPvB assessment not available as chemical safety

assessment not required/not conducted.

No specific data available. **Endocrine Disrupting Properties:**

Other Adverse Effects: Product may be toxic to aquatic life with long lasting

effects. An environmental hazard cannot be excluded in

the event of unprofessional handling or disposal.

Section 13. Disposal Considerations

Waste Treatment Methods

Product:

Dispose of in accordance with local, state, and federal regulations. Refer to 40 CFR 260-299 for complete waste disposal regulations. Consult your local, state, or federal agency before disposing of any chemicals.

Contaminated Packaging:

Empty containers retain product residue (dust, aerosols, vapors, gases) and can be dangerous. Dispose of as unused product.

Section 14. Transport Information

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UN Number	Not regulated	Not regulated	Not regulated
UN Proper Shipping Name	-	-	-
Transport Hazard Classes	-	-	-
Packing Group	-	-	-
Environmental Hazards	-	-	-
Additional Information	-	-	-

Special Precautions for User:

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory Information

Toxic Substance Control Act (TSCA)

This product is listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory).

This product as supplied is not subject to the TSCA Significant New Use Rule.

This product as supplied is not subject to TSCA 12(b) export notification requirements.

SARA 302 Components

This product does not contain any components which are subject to the reporting requirements of SARA Title III, Section 302 EHS TPQ.

SARA 304 Components

This product does not contain any components which are subject to the reporting requirements of SARA Title III, Section 304 RQ.

SARA 311/312 Hazards

Acute Health Hazard (Skin corrosion or irritation; Serious eye damage or eye irritation; Specific Target Organ Toxicity (STOT), single exposure: respiratory irritation).

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Water Act

Not applicable.

Clean Air Act

Not applicable.

CERCLA Reportable Quantity

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US Department of Homeland Security (DHS)

This product does not contain any DHS chemicals.

US Department of Transportation (DOT)

Component	Reportable Quantity	DOT Marine Pollutant	DOT Severe Marine Pollutant
Neodymium(III) chloride	No	No	No

US State Right-to-Know Listings

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Neodymium(III) chloride	-	Χ	-	-	-

[&]quot;X" - Listed.

Section 15. Regulatory Information

US State Chemicals of High Concern Listings

Component	Maine	Vermont	Washington
Neodymium(III) chloride	-	-	-

[&]quot;X" - Listed.

California Proposition 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16. Other Information

National Fire Protection Association (U.S.A.)



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Copyright © 2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

HMIS Rating

HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0

History

Date of Issue/Date of Revision: 5/21/2025.

Date of Previous Issue: 4/9/2020.

References: None available.

Section 16. Other Information

Abbreviations and Acronyms

ACGIH : American Conference of Governmental Industrial Hygienists.

AIHA : American Industrial Hygiene Association.

ATE : Acute Toxicity Estimate (per Chapter 3.1 of GHS 10 standard).

BEI : Biological Exposure Indices (ACGIH).

CAS : Chemical Abstracts Service (division of the American Chemical Society).

CHRIS : Chemical Hazards Response Information System (US DOT).

CLP : Classification, Labeling and Packaging (European Union (EU)).

DOT : US Department of Transportation.

EC-No. : The EC Inventory (EINECS, ELINCS and the NLP-list is the source of the seven digit

EC number, an identifier of substances commercially available with the EU (European

Union).

EINECS : European Inventory of Existing Commercial Chemical Substances.

EHS : Extremely Hazardous Substance.

ELINCS : European List of Notified Chemical Substances.

GHS : Globally Harmonized System of Classification and Labeling of Chemicals.

HAP : Hazardous Air Pollutants (Clean Air Act).HMIS : Hazardous Materials Identification System.

HNOC : Hazards Not Otherwise Classified.

IARC : International Agency for Research on Cancer.

IATA : International Air Transport Association.

IATA-DGR : Dangerous Goods Regulations by the "International Air Transport Association"

(IATA).

IDLH : Immediately Dangerous to Life or Health (US National Institute for Occupation Health

and Safety (NIOSH)).

IMDG : International Maritime Code for Dangerous Goods.

IP : Intraperitoneal.
IV : Intravenous.

NFPA : National Fire Protection Association.

NIOSH : National Institute of Occupational Safety and Health.

NSRL : No Significant Risk Levels. NTP : National Toxicology Program.

ODS : Ozone Depleting Substances (US Clean Air Act).

OECD : Organization for Economic Co-Operation and Development.

OEL : Occupational Exposure Limit.

OSHA : Occupational Safety and Health Administration.

PBT : Persistent Bioaccumulative and Toxic.

PEL : Permissible Exposure Limits.
REL : Recommended Exposure Limits.

RQ : Reportable Quantity.

SARA : Superfund Amendments and Reauthorization Act. STEL (ST) : Short Term Exposure Limit (ACGIH/NIOSH)

STOT : Specific Target Organ Toxicity.

Section 16. Other Information

Abbreviations and Acronyms (cont.)

TLV : Threshold Limit Values (ACGIH).TPQ : Threshold Planning Quantity.TWA : Time Weighted Average.VOC : Volatile Organic Compound.

vPvB : Very Persistent and Very Bioaccumulative.

WEEL: Workplace Environmental Exposure Level (AIHA).

Disclaimer

The information herein is believed to be accurate and is presented in good faith; however, no warranties or representations are made by Ereztech LLC regarding the accuracy or completeness of the information. Ereztech LLC shall not be liable for any damages resulting from the handling, or from the contact with the above product.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

