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SAFETY DATA SHEET

Section 1. Identification

Product Name: <u>Scandium chloride, anhydrous</u>

Product Type: Solid

CAS Number: 10361-84-9
Product Number: SC1849

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: White powder, odorless.

Classification: SKIN CORROSION/IRRITATION – Category 2, H315

SERIOUS EYE DAMAGE/EYE 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 and 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 if 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

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

tightly closed.

P405: Store locked up.

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

state and local regulations.

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

Communication Standard (29 CFR 1910.1200).

Hazards Not Otherwise Classified (HNOC):

None identified.

Section 3. Composition/Information on Ingredients

Mono-constituent. **Substance Type:**

Triochloroscandium; Scandium trichloride. Synonyms:

Formula: ScCI₃

151.32 g/mol. Molecular Weight: 233-799-1 EC-No.:

Component Name	%	CAS Number
Scandium chloride, anhydrous	≥ 98	10361-84-9

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.

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

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.

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

> 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.

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

> 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.

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

blistering with tissue necrosis.

Inhalation: Product may be irritating to respiratory system. Symptoms may include

coughing, sneezing with phlegm production, sore throat, nausea, headache,

vomiting.

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

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

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

Notes to Physician: Treat symptomatically.

No specific treatment. **Specific Treatments:**

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

General Hazards: None identified.

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

the local circumstances and the surrounding environment.

Unsuitable Extinguishing Media: For this substance/mixture no limitations of extinguishing

agents are given.

None identified; product is not flammable. **Unusual Fire and**

Explosion Hazards:

Product of Combustion:

scandium oxides.

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

> 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

Decomposition products include hydrogen chloride gas 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.

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

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

suitable training. Evacuate surrounding areas. Keep

unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Prevent the formation and inhalation of dusts, aerosols, vapors and gases. Provide

adequate ventilation.

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".

Prevent spilled material and firefighting runoff from entering **Environmental Precautions:**

> the surrounding environment (soil contact, entry into drains, sewers and waterways). Inform the relevant authorities if the

product has caused environmental pollution (sewers,

waterways, soil or air).

Methods for Containment

General: Stop leak/spillage and 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 (see Section 13).

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Section 6. Accidental Release Measures

General (cont.): Contaminated binding material may pose the same hazard as

the spilled product.

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

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. sand, earth, 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. Keep container tightly sealed. Avoid the formation and inhalation of dusts, aerosols, vapors and gases. 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. 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 **Occupational Exposure Limits:**

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

Hygiene Measures:

Wash 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 inhale dusts or aerosols. Avoid contact with eyes and skin. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/Face Protection:

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to aerosols or dusts. 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.

Exposure Controls/Personal Protection Section 8.

Hand Protection (cont.):

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. For full contact, wear Neoprene or nitrile rubber 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.

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 fullface 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

Solid. **Physical State:**

Color: White powder.

Odor: Odorless.

Odor Threshold: No data available. pH: No data available. 960 °C (1760 °F). **Melting Point: Boiling Point:** No data available. No data available. Flash Point: No data available. Flammability:

 2.39 g/cm^3 . **Density:**

Physical and Chemical Properties Section 9.

No data available. Vapor Pressure: No data available. Vapor Density: Water Solubility: 70.2 g/ 100 ml.

Section 10. Stability and Reactivity

Based on available information, no reactivity hazards have Reactivity:

been identified for this product.

Product is hygroscopic and is stable when stored under a **Chemical Stability:**

> dry, inert atmosphere and away from heat. Nitrogen containing less than 5 ppm each moisture and air is

recommended.

Conditions to Avoid: Exposure to moisture/water and incompatible products.

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

Hazardous Decomposition Products: Hazardous decomposition products formed under fire

conditions: hydrogen chloride gas and scandium oxide

fumes. In the event of a fire: see Section 5.

Possibility of Hazardous Reactions:

Under normal conditions of storage and use, 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: No specific data available.

Irritation/Corrosion: No specific data available. Product causes skin irritation

and serious eye irritation.

Sensitization: No specific data available.

Germ Cell Mutagenicity: No specific data available.

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.

No component of this product present at levels greater **IARC**

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.

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Section 11. Toxicological Information

Carcinogenicity (cont.)

OSHA No component of this product present at levels greater

than 0.1% is identified as probable, possible or

Inhalation – May cause respiratory tract irritation.

confirmed human carcinogen by OSHA.

Reproductive Toxicity: No specific data available.

Teratogenicity: No specific data available.

Specific Target Organ Toxicity:

(Single Exposure)

Specific Target Organ Toxicity: No specific data available.

(Repeated Exposure)

Aspiration Hazard: No specific data available.

Information on the LikelyCommon 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

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

aquatic environment. Product is unlikely to persist in the

environment based on its water solubility.

Numerical Measures of Toxicity: No specific data available.

Persistence and Degradability

Biodegradability: The methods for determining the biological degradability

are not applicable to inorganic substances.

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.

Endocrine Disrupting Properties: No specific data available.

Other Adverse 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.

Empty containers retain product residue (dusts, aerosols and/or **Contaminated Packaging:**

vapor) and can be dangerous. Dispose of as unused product.

Section 14. Transport Information

	DOT	IMDG	IATA	
UN Number	Not regulated	Not regulated	Not regulated	
UN Proper Shipping Name	-	-	-	
Transport Hazard Classes	-	-	-	
Packing Group	-	-	-	
Environmental Hazards	(<u> </u>	- /	-	
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 as supplied is listed as "Active" 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).

Section 15. Regulatory Information

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
Scandium chloride, anhydrous	No	No	No

US State Right-to-Know Listings

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Scandium chloride, anhydrous	-	-	-	-	-

[&]quot;X" - Listed.

US State Chemicals of High Concern Listings

Component	Maine	Vermont	Washington
Scandium chloride, anhydrous	-	-	-

[&]quot;X" - Listed.

California Proposition 65 Components

This product does not contain any Proposition 65 chemicals.

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	1

History

Date of Issue/Date of Revision: 6/10/2025.

Date of Previous Issue: None.

References: None available.

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).

Section 16. Other Information

Abbreviations and Acronyms (cont.)

EINECS European Inventory of Existing Commercial Chemical Substances.

: Extremely Hazardous Substance. FHS

ELINCS : European List of Notified Chemical Substances.

GHS Globally Harmonized System of Classification and Labeling of Chemicals.

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

Hazards Not Otherwise Classified. HNOC

: International Agency for Research on Cancer. IARC

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)).

International Maritime Code for Dangerous Goods. **IMDG**

IΡ Intraperitoneal. IV Intravenous.

NFPA : National Fire Protection Association.

National Institute of Occupational Safety and Health. NIOSH

NSRL No Significant Risk Levels. NTP National Toxicology Program.

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

: Organization for Economic Co-Operation and Development. **OECD**

OEL : Occupational Exposure Limit.

OSHA Occupational Safety and Health Administration.

PBT Persistent Bioaccumulative and Toxic.

PEL Permissible Exposure Limits. : Recommended Exposure Limits. RFL

Reportable Quantity. RO

Superfund Amendments and Reauthorization Act. SARA

STEL (ST) : Short Term Exposure Limit (ACGIH/NIOSH)

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

: Very Persistent and Very Bioaccumulative. vPvB

Workplace Environmental Exposure Level (AIHA). WFFI

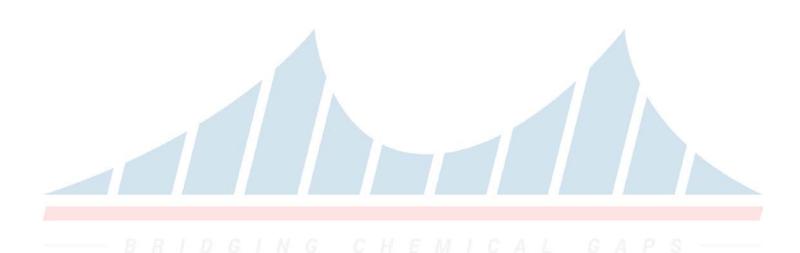
Disclaimer

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.

Section 16. Other Information

Disclaimer (cont.)

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.



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