



SAFETY DATA SHEET

ProChemOnline.com



SECTION 1 PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: **Cerium (III) chloride, anhydrous**

PRODUCT NUMBER: 1417

CAS NUMBER: 7790-86-5

SYNONYMS: Cerium trichloride, Cerous chloride

MANUFACTURER:

ProChem, Inc.
826 Roosevelt Road
Rockford, IL 61109

PHONE: 815-398-1788
FAX: 815-398-1810
TOLL FREE: 800-795-8788

IN CASE OF TRANSPORTATION EMERGENCY CONTACT CHEM-TREC: 1-800-424-9300

SECTION 2 HAZARDS IDENTIFICATION

CLASSIFICATION OF SUBSTANCE OR MIXTURE

Pictogram



Signal Word

Warning

Hazard Statements

H303	May be harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

Precautionary Phrases

P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash skin thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P304+P340+P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P363	Wash contaminated clothing before reuse.

HMIS CLASSIFICATION:

Health: 3

Flammability: 0

Reactivity: 0

NFPA RATING:

Health: 3

Fire: 0

Instability: 1

SECTION 2 HAZARDS IDENTIFICATION (Cont.)

EYE CONTACT: Causes mild irritation to the eyes.

SKIN CONTACT: Causes slight irritation of the skin.

INHALATION: Inhalation of dust leads to irritation of the respiratory tract.

INGESTION: May be harmful if swallowed.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Formula: CeCl_3

Molecular Weight: 246.48

CHEMICAL NAME	CAS#	%
Cerium (III) chloride, anhydrous	7790-86-5	100

SECTION 4 FIRST AID MEASURES

EYE EXPOSURE: Immediately flush the eyes with copious amounts of water for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.

SKIN EXPOSURE: Wash affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

INHALATION: Remove the victim to fresh air. Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, and pain. In such cases, seek immediate medical assistance.

INGESTION: Seek medical assistance immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.

SECTION 5 FIREFIGHTING MEASURES

FLASH POINT: Product is not flammable.

AUTO IGNITION TEMPERATURE: None

EXPLOSION LIMITS: None

EXTINGUISHING MEDIUM: Use fire fighting measures that suit the surrounding fire.

SPECIAL FIRE FIGHTING PROCEDURES: If involved in a fire, fire fighters should be equipped with a NIOSH approved positive self-contained breathing apparatus, flame and chemical resistant clothing, hats, boots, and gloves.

HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: Hydrogen chloride gas and cerium oxide.

SECTION 6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, dust, mist, or gas. Ensure adequate ventilation.

ENVIRONMENTAL PRECAUTIONS: Do not let product enter drains or allow to be released into the environment.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: Without creating dust sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 7 HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Avoid contact with skin and eyes. Provide appropriate exhaust ventilation at places where dust is formed.

CONDITIONS FOR SAFE STORAGE: Store material in a tightly sealed container away from moisture. Avoid contact with air/oxygen. Hygroscopic. Handle and store under inert gas.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

EYE PROTECTION: Always wear approved safety glasses with side shields, safety goggles, or face shield when handling a chemical substance in the laboratory.

SKIN PROTECTION: Chemical resistant gloves.

VENTILATION: Handle in an efficient chemical fume hood.

RESPIRATOR: If in form of fine dust and ventilation is not available a respirator should be worn. The use of respirators requires a Respirator Protection Program to be in compliance with 29 CFR 1910.134.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION (Cont.)

ADDITIONAL PROTECTION: Safety shower and eyewash in area. Use in a controlled environment. Do not drink, eat, or smoke in area.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

COLOR AND FORM: White powder

ODOR: Odorless

MOLECULAR WEIGHT: 246.48

BOILING POINT: 1727° C

MELTING POINT: 848° C

SPECIFIC GRAVITY: 3.92

VAPOR PRESSURE: No data

SOLUBILITY IN WATER: Soluble

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Hygroscopic.

HAZARDOUS POLYMERIZATION: No hazardous polymerization.

CONDITIONS TO AVOID: Contact with moisture.

INCOMPATIBILITY: Active metals, strong oxidizing agents, and strong acids.

DECOMPOSITION PRODUCTS: Hydrogen chloride gas and cerium oxide.

SECTION 11 TOXICOLOGICAL DATA

ACUTE TOXICITY: LD50 Oral – Rat – male and female – 2,800 mg/kg

CARCINOGENIC EFFECTS: No components of this product present at levels greater than or equal to 0.1% is identified as a confirmed carcinogen by IARC, ACGIH, NTP, and OSHA.

MUTAGENIC EFFECTS: No data

TETRATOGENIC EFFECTS: No data

RTECS DATA: FK5075000

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

SECTION 12 ECOLOGICAL DATA

TOXICITY TO FISH: LC50 – *Oncorhynchus mykiss* – 0.3 mg/l – 96 h.

TOXICITY TO DAPHNIA AND OTHER AQUATIC INVERTEBRATES: EC50 – *Daphia Magna* – 6.9 mg/l – 48 h

TOXICITY TO ALGAE: ErC50 – *Pseudokirchneriella subcapitata* – 1.1 mg/l – 72 h.

TOXICITY TO BACTERIA: EC50- Activated Sludge – 767 mg/l – 3 h.

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of in according to local state and federal regulations.

SECTION 14 TRANSPORTATION DATA

Non-hazardous material

SECTION 15 REGULATORY INFORMATION

TSCA: Listed in the TSCA Inventory

SARA 302 COMPONENTS: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SECTION 15 REGULATORY INFORMATION (Cont.)

SARA (TITLE 313): 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.

MASSACHUSETTS RIGHT TO KNOW COMPONENTS: No components are subject to the Massachusetts Right to Know Act.

PENNSYLVANIA RIGHT TO KNOW COMPONENTS: Cerium trichloride.

NEW JERSEY RIGHT TO KNOW COMPONENTS: Cerium trichloride.

CALIFORNIA PROP. 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

DISCLAIMER: The information herein is believed to be accurate and reliable as of the date compiled. However, ProChem, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.

DATE REVISED: 02/24

SDS DEPT.