



SAFETY DATA SHEET

ProChemOnline.com



SECTION 1 PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: **Cerium (III) fluoride**

PRODUCT NUMBER: 1419

CAS NUMBER: 7758-88-5

SYNONYMS: Cerous fluoride

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

H312 + H332	Harmful in contact with skin or if inhaled
H319	Causes serious eye irritation
H335	May cause respiratory irritation

Precautionary Phrases

P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P280	Wear protective gloves/protective clothing/eye protection/face protection
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

HMIS CLASSIFICATION:

Health: 1 Flammability: 0 Reactivity: 0

NFPA RATING:

Health: 1 Fire: 0 Reactivity Hazard: 0

EYE CONTACT: May cause irritation of the eyes.

SKIN CONTACT: May cause mild irritation and redness.

INHALATION: May cause irritation to the respiratory tract. Symptoms may include coughing and shortness of breath.

SECTION 2 HAZARDS IDENTIFICATION (Cont.)

INGESTION: Toxicity reduced to the extent that this compound is relatively insoluble. In large amounts may cause vomiting, abdominal pain, and diarrhea.

ACUTE HEALTH EFFECTS: Ingestion of large amounts may cause fluoride poisoning. Symptoms include nausea, vomiting, diarrhea, weakness, coma, and cardiovascular collapse.

CHRONIC HEALTH EFFECTS: Prolonged exposure to hydrolysable fluorine compounds can cause deterioration of bone and tooth structure.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Formula: CeF₃

Molecular Weight: 197.12

CHEMICAL NAME	CAS#	%	ACGIH (TWA)	OSHA (PEL)
Cerium (III) fluoride	7758-88-5	100	2.5 mg/m ³ (as F)	2.5 mg/m ³ (as F)

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, or 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 or combustible.

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 fluoride and cerium oxide.

SECTION 6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Use personal protective equipment. Avoid dust formation. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

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

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: Small spills can be mixed with powdered sodium bicarbonate, lime, or calcium carbonate and swept up.

SECTION 7 HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation.

CONDITIONS FOR SAFE STORAGE: Keep container tightly closed in a dry and well-ventilated place. Moisture sensitive. Handle and store under inert gas. Keep in a dry place.

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.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION (Cont.)

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 19-10.134.

ADDITIONAL PROTECTION: Protection to avoid contact with skin, eyes, and clothing. 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 to off-white powder

MOLECULAR WEIGHT: 197.12

BOILING POINT: 2300° C (approx.)

MELTING POINT: 1460° C

SPECIFIC GRAVITY: 6.16 gm/ml

VAPOR PRESSURE: No data available

SOLUBILITY: Insoluble

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Hygroscopic

HAZARDOUS POLYMERIZATION: No hazardous polymerization

CONDITIONS TO AVOID: Contact with moisture

INCOMPATIBILITY: Active metals and oxidizing agents.

DECOMPOSITION PRODUCTS: Hydrogen fluoride and cerium oxide.

SECTION 11 TOXICOLOGICAL DATA

ACUTE TOXICITY: LD50 Oral – rat - > 5,000 mg/kg

CARCINOGENIC EFFECTS: 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 available

TETRATOGENIC EFFECTS: No data available

RTECS DATA: FK6125000

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

SECTION 12 ECOLOGICAL DATA

No information available

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 313 COMPONENTS: Title compound not listed

SECTION 15 REGULATORY INFORMATION (Cont.)

OSHA: Toxic by inhalation. Harmful by skin absorption. Irritant.

SARA 311/312 Hazards: Acute health hazard

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

PENNSYLVANIA RIGHT TO KNOW COMPONENTS: Cerium (III) fluoride

NEW JERSEY RIGHT TO KNOW COMPONENTS: Cerium (III) fluoride

CALIFORNIA PROP. 65 COMPONENTS: This product does not contain any chemicals known to the 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.

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