



SAFETY DATA SHEET

ProChemOnline.com



SECTION 1 PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: **Cerium, chips**

PRODUCT NUMBER: 1399

CAS NUMBER: 7440-45-1

SYNONYMS: Rare earth metal

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

Danger

Hazard Statements

H228	Flammable solid.
------	------------------

Precautionary Phrases

P210	Keep away from heat/sparks/open flames/hot surfaces. –No smoking.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P270	Do not eat, drink, or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P370+P378	In case of fire: Use dry sand, dry chemical, or alcohol-resistant foam for extinction.

HMIS CLASSIFICATION:

Health: 2 Fire: 3 Reactivity Hazard: 1

NFPA RATING:

Health: 2 Flammability: 3 Reactivity Hazard: 1 Special: W

EYE CONTACT: Oil and dust, if present, may cause slight to mild irritation of the eyes.

SKIN CONTACT: Dust, if present, may cause slight to mild irritation of the skin.

INHALATION: Inhalation of any oil free fine dust may be irritating to the nasal cavity, mucous membranes, and respiratory tract.

INGESTION: Mineral oil may be harmful.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Formula: Ce
Molecular Weight: 140.12

CHEMICAL NAME	CAS#	%
Cerium	7440-45-1	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 to fresh air and keep at rest. 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: Not available

AUTO IGNITION TEMPERATURE: Not available

EXPLOSION LIMITS: Not available

EXTINGUISHING MEDIUM: Use special powder for metal fires. Do not use water. Contact with water released flammable gases.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: Cerium oxide

SECTION 6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Wear all appropriate equipment when using this material. Ensure adequate ventilation. Avoid the formation of dust. Avoid breathing vapors, mist, gas, or dust. Remove from sources of ignition.

ENVIRONMENTAL PRECAUTIONS: Prevent spillage from entering drains or allowing to be released into the environment.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: Pick up and arrange disposal without creating dust. Sweep up and keep in suitable, closed containers for disposal.

SECTION 7 HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Wear appropriate personal protective equipment. Use with adequate ventilation. Avoid contact with skin and eyes. Avoid formation of dust. Handle under inert gas.

CONDITIONS FOR SAFE STORAGE: Store in cool, dry, and well-ventilated area. Store away from air, water, and moisture. Store under dry inert gas. Protect from humidity and water.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

EXPOSURE CONTROLS: Contains no substances with occupational exposure limits.

EYE PROTECTION: Wear chemical safety glasses or goggles and face shield.

SKIN PROTECTION: Wear nitrile or rubber gloves, apron, or lab coat.

VENTILATION: Provide local exhaust, preferably mechanical.

RESPIRATOR: Use an approved respirator.

ADDITIONAL PROTECTION: Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

COLOR AND FORM: Dark grey chips

ODOR: None

MOLECULAR WEIGHT: 140.12

BOILING POINT: 3433° C

MELTING POINT: 795° C

SPECIFIC GRAVITY: 6.67

VAPOR DENSITY: No data available

SOLUBILITY IN WATER: Contact with water releases flammable gases

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID: Contact with water or of any oil free fine dust with air. Heat, flames, & sparks.

INCOMPATIBILITY: Water, alcohols, oxidizers, oxygen, carbon dioxide, halogens, halocarbons, and acids. Strong Acids, halogens, strong oxidizing agents, zinc.

DECOMPOSITION PRODUCTS: Cerium oxide

SECTION 11 TOXICOLOGICAL DATA

ACUTE TOXICITY:

LD50 Oral - Rat - male and female - > 5,000 mg/kg Remarks: (in analogy to similar compounds) Inhalation: No data available

LC50 Inhalation - Rat - male and female - 4 h - > 5.05 mg/l (OECD Test Guideline 403) Remarks: (in analogy to similar products)

CARCINOGENIC EFFECTS: No components of this product present at levels greater than or equal to 0.1% is identified a carcinogen.

MUTAGENIC EFFECTS: Not available

TETRATOGENIC EFFECTS: Not available

RTECS: Not available

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

SECTION 12 ECOLOGICAL DATA

No data available

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of in according to local, state, and federal regulations.

SECTION 14 TRANSPORTATION DATA

UN3078

Cerium

Class 4.3

PG II

Marine Pollutant: No

SECTION 15 REGULATORY INFORMATION

TSCA: Listed in the TSCA inventory

SARA 302/304: Not listed

SARA 311/312: Acute Health Hazard, Reactivity Hazard

SARA (TITLE 313): Not listed

PENNSYLVANIA RIGHT TO KNOW: Cerium, slabs, ingots or rods

NEW JERSEY RIGHT TO KNOW: Cerium, slabs, ingots or rods

CALIFORNIA PROP. 65: Not Listed

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.