



# SAFETY DATA SHEET

ProChemOnline.com



## SECTION 1 PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: **Niobium Powder**

PRODUCT NUMBER: 2728

CAS NUMBER: 7440-03-1

SYNONYMS: Columbium

### 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.
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### Precautionary Phrases

P210	Keep away from heat/sparks/open flames/hot surfaces.- No smoking.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P370+P378	In case of fire: Use for extinction: Carbon dioxide, powder, or water spray.

### HMIS CLASSIFICATION:

Health: 1      Fire: 3      Reactivity Hazard: 1

### NFPA RATING:

Health:1      Flammability: 3      Reactivity Hazard: 1

**EYE CONTACT:** May cause slight to mild irritation of the eyes.

**SKIN CONTACT:** May cause slight to mild irritation to the skin.

**INHALATION:** May be irritating to the nasal cavity, mucous membranes, and respiratory tract.

**INGESTION:** No specific information is available on the physiological effects of ingestion.

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Formula: Nb

Molecular Weight: 92.91

CHEMICAL NAME	CAS#	%
Niobium	7440-03-1	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 plenty of 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:** Special powder for metal fires. Do not use water.

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

**HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:** Niobium oxides

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** Wear all appropriate equipment when using this material. Ensure adequate ventilation. Avoid dust formation. Avoid breathing dust.

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

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:** Cover spill with sodium carbonate and dolomite to reduce formation of dust. Sweep up and place in suitable container for proper disposal.

## SECTION 7 HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING:** Wear appropriate personal protective equipment. Ensure adequate ventilation. Avoid contact with skin and eyes.

**CONDITIONS FOR SAFE STORAGE:** Store in cool, dry, and well-ventilated area. Store away from oxidizing agents.

## SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

**EXPOSURE CONTROLS:** Contains no substances with occupational exposure limit values.

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

**SKIN PROTECTION:** Wear nitrile or rubber gloves, and a complete suit protecting against chemicals.

**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:** Gray powder  
**ODOR:** None  
**MOLECULAR WEIGHT:** 92.91  
**BOILING POINT:** 4927° C  
**MELTING POINT:** 2477° C  
**SPECIFIC GRAVITY:** 8.57 gm/ml  
**VAPOR DENSITY:** No data available  
**SOLUBILITY:** Insoluble

## SECTION 10 STABILITY AND REACTIVITY

**STABILITY:** Stable  
**HAZARDOUS POLYMERIZATION:** Will not occur  
**CONDITIONS TO AVOID:** None  
**INCOMPATIBILITY:** Strong bases, strong oxidizing agents, halogens, and oxygen  
**DECOMPOSITION PRODUCTS:** Niobium oxides

## SECTION 11 TOXICOLOGICAL DATA

**ACUTE TOXICITY:** Not available  
**CARCINOGENIC EFFECTS:** No components of this product present at levels greater than or equal to 0.1% are considered to be a human carcinogen.  
**MUTAGENIC EFFECTS:** Not available  
**TETRATOGENIC EFFECTS:** Not available  
**CHRONIC TOXICITY:** Not available  
**RTECS:** QT9900000

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

<b>DOT:</b> UN3089 Metal powders, flammable, n.o.s. (Niobium powder) CLASS 4.1 PG II	<b>IATA:</b> UN3089 Metal powder, flammable, n.o.s. (Niobium power) CLASS 4.1 PG II
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Marine Pollutant: No

## SECTION 15 REGULATORY INFORMATION

**SARA 302/304:** Not Listed  
**SARA 311/312:** Not Listed  
**SARA (TITLE 313):** Not listed

## **SECTION 15 REGULATORY INFORMATION (Cont.)**

**CALIFORNIA PROP. 65:** Not Listed

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

**NEW JERSEY RIGHT TO KNOW COMPONENTS:** Niobium

**PENNSYLVANIA RIGHT TO KNOW COMPONENTS:** Niobium

## **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 PREPARED:** 03/15

**SDS DEPT.**