



SAFETY DATA SHEET

ProChemOnline.com



SECTION 1 PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: **Hafnium, crystal bar**
PRODUCT NO: 1945
CAS NO: 7440-58-6

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

Not a dangerous substance according to the GHS

HMIS CLASSIFICATION:

Health: 0 Flammability: 0 Reactivity: 0

NFPA RATING:

Health: 0 Fire: 0 Reactivity Hazard: 0

EYE CONTACT: The dust may cause slight to mild irritation of the eyes.

SKIN CONTACT: The dust may cause slight to mild irritation of the skin.

INHALATION: Hazard associated with inhalation of fine dust or fume. May be irritating to nasal cavity and respiratory tract.

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

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Formula: Hf

Molecular Weight: 178.49

CHEMICAL NAME	CAS#	%	ACGIH (TWA)	OSHA (PEL)
Hafnium crystal bar	7440-58-6	96	0.5 mg/m ³ (as Hf)	0.5 mg/m ³ (as Hf)
Zirconium	7440-67-7	4	5 mg/m ³ (as Zr)	5 mg/m ³ (as Zr)

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.

SECTION 4 FIRST AID MEASURES (Cont.)

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: Not applicable

AUTO IGNITION TEMPERATURE: Not applicable

EXPLOSION LIMITS: Not applicable

EXTINGUISHING MEDIUM: Special powder for metal fires. Do not use water.

SPECIAL FIRE FIGHTING PROCEDURES: If involved in a fire, fire fighters should be equipped with a NIOSH approved positive pressure self-contained breathing apparatus and full protective clothing.

HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: Metal oxide fume

UNUSUAL FIRE OR EXPLOSION HAZARDS: Potentially combustible as fine dust. Dust may form explosive mixtures with air under some conditions.

SECTION 6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Avoid dust formation. Avoid breathing dust, vapors, mist, or gas.

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

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: Spills can simply be swept up.

SECTION 7 HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Provide appropriate exhaust ventilation at places where dust is formed.

CONDITIONS FOR SAFE STORAGE: Store material in a tightly sealed container in a cool 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 chemicals substance in the laboratory.

SKIN PROTECTION: Chemical resistant gloves.

VENTILATION: If possible, handle the material in an efficient 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.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

COLOR AND FORM: Grey to silver solid

MELTING POINT: 2227° C

BOILING POINT: 4602° C

MOLECULAR WEIGHT: 178.49

ODOR: Odorless

SPECIFIC GRAVITY: 13.31 gm/ml

VAPOR PRESSURE: Not applicable

SOLUBILITY IN WATER: Insoluble

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Stable

HAZARDOUS POLYMERIZATION: No hazardous polymerization

CONDITIONS TO AVOID: Mixtures of fine dust with air in contact with an ignition source.

SECTION 10 STABILITY AND REACTIVITY (Cont.)

INCOMPATIBILITY: Mineral acids, halogens, and halocarbons

DECOMPOSITION PRODUCTS: Metal oxide fume

SECTION 11 TOXICOLOGICAL DATA

CARCINOGENIC EFFECTS: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen.

MUTAGENIC EFFECTS: No data

TETRATOGENIC EFFECTS: No data

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 (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.

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: 05/14

SDS DEPT.