

MATERIAL SAFETY DATA SHEET

24 HR. EMERGENCY PHONE # CHEM-TREC 1-800-424-9300

Manufacturer: ProChem, Inc.
826 Roosevelt Road
Rockford, IL 61109

Phone: (815) 398-1788
Fax: (815) 398-1810
E-Mail: Prochem1@aol.com

SECTION 1 Product Identification

CHEMICAL NAME: Germanium powder

CAS #: 7440-56-4

FORMULA: Ge

SECTION 2 Composition and Information on Ingredients

INGREDIENT:	CAS #	%	ACGIH (TWA)	OSHA (PEL)
Title Compound	7440-56-4	100	no data	no data

SECTION 3 Hazards Identification

EMERGENCY OVERVIEW: Inhalation hazard as a fine dust or fume.

PRIMARY ROUTES OF EXPOSURE: Inhalation (of dust or fume), ingestion

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. May be irritating to nasal cavity and respiratory tract.

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

CHRONIC HEALTH EFFECTS: No information available on health effects of prolonged or repeated exposure.

ACUTE HEALTH EFFECTS: Dust may be irritating to eyes and respiratory tract.

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: not applicable

AUTO IGNITION TEMPERATURE: not applicable

EXPLOSION LIMITS: not applicable

EXTINGUISHING MEDIUM: Dry chemical or Class D metal fire agent

SPECIAL FIREFIGHTING 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: : If involved in a fire, burning germanium may produce mildly irritating fumes of germanium

UNUSUAL FIRE OR EXPLOSION HAZARDS: Combustible solid. Dust may form explosive mixtures with air under some conditions

SECTION 6 Accidental Release Measures

SPILL AND LEAK PROCEDURES: In the case of a spill, the fine powder should be covered with sodium carbonate or dolomite in order to reduce the formation of airborne dust. Sweep up the mixture.

SECTION 7 Handling and Storage

HANDLING AND STORAGE: Store material in a tightly sealed container . Handle fine powders in a well-ventilated area.

SECTION 8 Exposure Controls and Personal Protection

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

SKIN PROTECTION: Chemical-resistant.

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: -10 mesh

MOLECULAR WEIGHT: 72.59

MELTING POINT (DEG. C.): not applicable

BOILING POINT: 2830^o

VAPOR PRESSURE: not applicable

SPECIFIC GRAVITY: 5.323

SOLUBILITY IN WATER: insoluble

SECTION 10 Stability and Reactivity

STABILITY: air and moisture stable solid

HAZARDOUS POLYMERIZATION: no hazardous polymerization
CONDITIONS TO AVOID: Mixtures of fine dust with air. Contact with an ignition source.
INCOMPATIBILITY: Aqua Regia, halogens and oxidizing agents.
DECOMPOSITION PRODUCTS: none

SECTION 11 Toxicological Information

RTECS DATA: Oral (Human-man); TDLo: 58 mg/kg/26W-1. Oral (Human-child); TDLo: 2 gm/kg/78W-1. Oral (Human-man); TDLo: 78 mg/kg/2Y-1. Inhalation (rat); LCLo: 3860 mg/m³/4H. Inhalation (rat); TCLo: 250 mg/m³/6H/4W-1.

MUTAGENIC EFFECTS: no data
TETRATOGENIC EFFECTS: no data
CARCINOGENIC EFFECTS: no data

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

SECTION 12 Ecological Information

ECOLOGICAL INFORMATION: No information available

SECTION 13 Disposal Considerations

DISPOSAL: Dispose of in according to local state and federal regulations.

SECTION 14 Transportation Information

Non-hazardous

Non-hazardous

SECTION 15 Regulatory Information

TSCA: Listed in the TSCA inventory
SARA (TITLE 313): Title compound 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 PREPARED: 10/05