MATERIAL SAFETY DATA SHEET

Pure Tech   Emergency Phone Numbers:
P.O. Box 1950   CHEMTREC: 800/424-9300
Brewster, New York 10509-8950   POISON CENTER: 800/562-8236
845/279-0900   Date of
Last Revision:10/89

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SECTION 1
PRODUCT IDENTIFICATION

CHEMICAL NAME(S) AND SYNONYM(S): **Germanium**   FORMULA: **Ge**
CHEMICAL FAMILY: Element   CHEM. ABSTRACT NO.: 7440564
TSCA: Product is listed.   CAL. MOLECULAR WEIGHT:

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SECTION 2
INGREDIENTS/SUMMARY OF HAZARDS

INGREDIENT(S)   CAS #   %   TLV   OSHA PEL
 Not Applicable

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SECTION 3
PHYSICAL DATA

BOILING POINT (^{O}F) :   5126   DENSITY (gm/cc):   5.323
VAPOR PRESSURE: N/A   % VOLATILE BY VOLUME: N/A
REACTION WITH WATER: None   EVAPORATION RATE: N/A

SOLUBILITY WITH WATER: Insoluble   MELTING POINT (^{O}C):   936
APPEARANCE/ODOR: Grayish white metal, odorless.
OTHER:

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SECTION 4
FIRE AND EXPLOSION HAZARD DATA
FLASHPOINT/METHOD: N/A

AUTOIGNITION TEMP (^{O}C): N/A
FLAMMABILITY: Non-flammable
EXTINGUISHING MEDIA: (x) Water   ( ) Foam   ( ) Class D Extinguisher
                      (x) Dry Chemical   (x) CO(2)
                      ( ) Other (specify):
SPECIAL FIRE FIGHTING PROCEDURES: Wear NIOSH/MSHA approved self-containedbreathing apparatus and full protective clothing.
UNUSUAL FIRE AND EXPLOSION HAZARDS: None
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SECTION 5
HEALTH HAZARD DATA

TOXICITY DATA: Considered to be of low toxicity.

ROUTE(S) OF ENTRY: ( ) Inhalation   (x) Skin   ( ) Ingestion

EFFECTS OF OVEREXPOSURE (acute and chronic)

INHALATION: Unknown.

DERMAL/EYE CONTACT: May be a mild irritant.

OTHER (specify):

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None

CARCINOGENCITY: None   NTP: IARC MONOGRAPHS: OSHA REGULATED:

EMERGENCY AND FIRST AID PROCEDURES:

INGESTION: Induce vomiting. Seek Medical attention.

INHALATION: Remove victim to fresh air. Administer oxygen. Seek medical attention.

SKIN: Brush material off skin. Wash affected area with soap and water.

EYES: Flush eyes with water for 15 mins. Seek medical attention.

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SECTION 6
REACTIVITY DATA

STABILITY: (x) Stable   ( ) Unstable
CONDITIONS CONTRIBUTING TO UNSTABILITY:

INCOMPATIBILITY (materials to avoid):
( ) Water   ( ) Combustible materials   ( ) Strong bases
( ) Reducing Agents   ( ) Strong oxidizing materials ( ) Strong acids
(x) Other (specify): Bromine, chlorine, fluorine, oxygen, potassium
chlorate and potassium when Germanium is heated.

HAZARDOUS DECOMPOSITION PRODUCTS: None

HAZARDOUS POLYMERIZATION: ( ) May occur   (x) Will not occur
CONDITIONS TO AVOID: None known.
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SECTION 7
SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Wearing full
protective clothing, isolate the area and insure proper ventilation.
Vacuum up spill and place in a container for proper disposal.

WASTE DISPOSAL METHOD: In accordance with regulations.

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SECTION 8
SPECIAL PROTECTIVE INFORMATION

RESPIRATORY PROTECTION: (Specify type) NIOSH/MSHA approved respirator

VENTILATION: LOCAL EXHAUST: Recommended
               MECHANICAL (General): Germanium Fractures
               SPECIAL:

PROTECTIVE GLOVES: Rubber Gloves

EYE PROTECTION: (x) Safety Glasses with Side Shields
                  ( ) Chemical Workers Dust-Proof Goggles (under dusting
conditions)
                  ( ) Gas-Tight Goggles or Equivalent
                  ( ) Other (specify):

OTHER PROTECTIVE EQUIPMENT: Maintain sink, safety shower and eyewash
fountain in the work area. Wear full protective clothing at all times.

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SECTION 9
<u>SPECIAL</u> <u>PRECAUTIONS</u> <u>AND</u> <u>TRANSPORTATION</u> <u>REGULATIONS</u>

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Store in tightly
closed containers in a cool, dry place. Wash hands and face thoroughly.
TRANSPORTATION REQUIREMENTS: No specific requirements.
   DOT CLASS:
   UN NUMBER:
   IMCO CLASS:
   OTHER:
ND = No Data Found   NA = Not Applicable

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