

## MATERIAL SAFETY DATA SHEET

PRODUCT NAME: CHALCOGENIDE GLASS INFRARED FIBER  
PRODUCT DESCRIPTION: INFRARED TRANSMITTING GLASS FIBER  
CAS No.: None established.  
INGREDIENTS (Typical Values - Not Specifications):

Arsenic (CAS 7440-38-2)  
Selenium (CAS 7782-49-2)  
Tellurium (CAS 13494-80-9)

PRODUCT CLASSIFIED AS: NON-HAZARDOUS  
DOT WARNING STATEMENT: NONE CONSIDERED NECESSARY

### SECTION 1 - PHYSICAL DATA

BOILING POINT: n.a.  
VAP. PRESSURE: n.a.  
VAP. DENSITY (AIR=1): n.a.  
APPEARANCE: Opaque glassy looking fiber.  
SOL. IN WATER: INSOLUBLE  
SP. GRAVITY: 4.4  
% VOLATILE (BY VOL.): 0

### SECTION 2 - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: n.a. EXTINGUISHING MEDIA: n.a.  
FLAMMABLE LIMITS (STP IN AIR): LFL, n.a.; UFL, n.a.  
SPECIAL FIRE FIGHTING EQUIPMENT AND HAZARDS: None special techniques required. Use extinguisher type suitable for surrounding fire.

### SECTION 3 - REACTIVITY DATA

STABILITY: Stable Compound  
INCOMPATIBILITY: None Known  
HAZARDOUS DECOMPOSITION PRODUCTS: See Section 8.  
HAZARDOUS POLYMERIZATION: n.a.

### SECTION 4 - SPILL, LEAK AND DISPOSAL PROCEDURES

ACTION TO TAKE FOR SPILLS: Contain spill. Clean up and transfer spilled material to separate container for recovery or disposal.  
WASTE DISPOSAL METHOD: Due to value of scrap material, waste should be collected and returned to a vendor for salvage and/or reclamation. Non-reclaimable material should be disposed of in accordance with appropriate local, state or federal regulations.

### SECTION 5 - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE (TLV): A TLV has not been established for CHALCOGENIDE GLASS INFRARED FIBER. Recommended exposure levels for individual components are as follows:  
Arsenic Compounds: 500 micrograms (as As) per cubic meter of air determined as a time-weighted average (TWA) exposure for up to eight hours. (Source: OSHA 1910.1000, Subpart z, Table Z-1-A)  
Selenium Compounds: 200 micrograms (as Se) per cubic meter of air determined as a TWA exposure of up to eight hours. (Source: OSHA 1910.1000, Subpart Z, Table Z-1-A).  
Tellurium Compounds: 100 micrograms (as Te) per cubic meter of air determined as a TWA exposure of up to eight hours. (Source: OSHA 1910.1000, Subpart Z, Table Z-1-A).  
POSSIBLE EFFECTS OF OVEREXPOSURE: No adverse health effects should occur from exposure to CHALCOGENIDE GLASS INFRARED FIBER. Under extreme conditions, individual components of CHALCOGENIDE GLASS INFRARED FIBER material could possibly (although not likely) cause non-specific symptoms, such as nausea, vomiting, diarrhea, hot flashes and progressive anxiety. However, separation of the individual components of CHALCOGENIDE GLASS INFRARED FIBER is not expected to occur.

### SECTION 6 - FIRST AID

EYES: Flush with flowing water for 15 minutes after contact with dust or fumes.  
SKIN: Flush with plenty of water after contact with dust or fumes.  
INHALATION: If ill effects or symptoms develop, remove affected person to fresh air, keep person warm and quiet. Seek medical help immediately.  
INGESTION: Should not be a problem. If material is swallowed, induce vomiting. Seek medical help.

### **SECTION 7 - SPECIAL HANDLING INFORMATION**

VENTILATION: Ventilation should be provided sufficient to remove any dusts, mists or odors that may evolve during processing. Local exhaust air of 100 lineal feet per minute (lfm) face velocity should be adequate. Avoid breathing any fumes or dusts that may be generated because of arsenic or selenium content.

RESPIRATORY PROTECTION: Ordinarily, respiratory protection is not required if adequate ventilation is provided. In unventilated areas a high efficiency respirator, approved for toxic dusts, should be used.

PROTECTIVE CLOTHING: Rubber gloves and plastic aprons should be provided.

EYE PROTECTION: Chemical workers goggles or plastic face shields should be used to provide eye protection from dusts, fumes, mists or flying particles should product break or fragment during processing operations.

### **SECTION 8-SPECIAL PRECAUTIONS & ADDITIONAL INFORMATION**

No special safety precautions are required in handling, storing o processing CHALCOGENIDE GLASS INFRARED FIBER.

Plastic coating materials, sometimes used to coat the glass fiber to provide flexibility, may decompose at elevated temperatures and emit ammonia-like odors. This does not cause a significant exposure or represent a health hazard. Increasing the local exhaust ventilation *will* remove any odor problem.

NOTES:

a. Specific percentage is considered proprietary.

b. n.a. means "Not Applicable."

c. This data is furnished gratuitously, independent of any sale of the product only for your investigation and independent verification. While the information is believed to be correct, AMORPHOUS MATERIALS, INC. makes no representation as to the accuracy of the information contained herein.

PREPARED BY: Dr. Roy H. Kinslow, P.E.

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