MATERIAL SAFETY DATA SHEET

PRODUCT NAME: GALLIUM ARSENIDE
INGREDIENTS: GaAs 99.00%

PROUDUCT CLASSFIES AS: NON-HAZARDOUS

WARNING STATEMENT: None considered necessary

SECTION 1 – PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: NA (*)
VAP. PRESSURE: NA
VAP. DENSITY: (AIR-1): NA
SOL IN WATER: INSOLUBLE
SP. GRAVITY: S.31
% VOLATILE (BY VOL): 0
APPEARANCE: SILVERY-GRAY, BRITTLE, METALLIC LUMPS
ODOR: NA

SECTION 2 – FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: NA
EXTINGUISHING MEDIA: NA
FLAMMABLE LIMITS (STP IN AIR): NON-FLAMMABLE
SPECIAL FIRE FIGHTING EQUIPMENT AND HAZARDS: None required. Use extinguisher suitable for surrounding fire. GALLIUM ARSENIDE fumes in air at melting point.

SECTION 3 – REACTIVITY DATA

STABILITY: Stable compound
INCOMPATIBILTY: None known
HAZARDOUS DECOMPOSITION PRODUCTS: None known
HAZARDOUS POLYMERIZATION: NA

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 f in accordance with appropriate local, state or federal regulations.

SECTION 5 – HEALTH HAZARD DATA

OSHA has not established a permissible exposure level (PEL) for GALLIUM ARSENIDE nor has the American Conference of Governmental Hygienists (ACGH) set a threshold limit value (TLV).

OSHA has set a PEL for arsenic compounds of 0.01 milligrams per cubic meter determined as a TWA exposure for up to 8 hours. (Source: OSHA 1510.1000, Subpart Z, Table Z-1, revised).

A TLV or PEL has not been set for gallium compounds.

POSSIBLE EFFECTS OF OVEREXPOSURE: No adverse health effects should occur from exposure to GALLIUM ARSENIDE material. Under extreme conditions, individual components of GALLIUM ARSENIDE material may cause non-specific symptoms such as nausea, vomiting, diarrhea, hot flashes and progressive anxiety. However, separation of the individual components of GALLIUM ARSENIDE is not expected to occur.

SECTION 6 – FIRST AID PROCEDURES

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 develop, remove person to fresh air, keep person warm and quiet. Seek medical help.

INGESTION: If GALLIUM ARSENIDE is swallowed, induce vomiting. Seek medical help.

SECTION 7 – SPECIAL HANDLING INFORMATION

VENTILATION: Should be sufficient to remove any mist or odors which evolve during processing. Forced exhaust air of 100 lineal feet per fumes and dusts because of potential arsenic content.

RESPIRATORY PROTECTION: 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 to protect workers from splash of cutting or polishing compounds used for processing GALLIUM ARSENIDE.

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.

SECTION 8 – SPECIAL PRECASUTIONS & ADDITIONAL INFORMATION

No special safety precautions are required in handling, storing or processing GALLIUM ARSENIDE. However, mechanical polishing may cause emission of unpleasant sulfide-like odor. This does not represent a significant exposure or represent a health hazard as the threshold or smell for these odors is much lower than the TLV's established for the individual components. Increasing the exhaust ventilation will remove the odor problem.

SPECIAL NOTE:

This Material Safety Data Sheet is considered to be an essentially similar form to OSHA Form-20 (a non-mandatory form) and is submitted in lieu thereof.

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