SAFETY DATA SHEET

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SECTION 1. IDENTIFICATION

Product Name: Gallium(II) Sulfide

Product Number: All applicable American Elements product codes, e.g. GA-S-05-I , GA-S-05-L , GA-S-05-P , GA-S-05-ST , GA-S-05-WF

CAS #: 12024-10-1

Relevant identified uses of the substance: Scientific research and development

Supplier details:
American Elements
10884 Weyburn Ave.
Los Angeles, CA 90024
Tel: +1 310-208-0551
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Emergency telephone number:
+1 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

Signal Word: Danger



Hazard Statements:
H314: Causes severe skin burns and eye damage
Precautionary Statements:
P260: Do not breathe dust/fume/gas/mist/vapors/spray
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P405: Store locked up
P501: Dispose of contents/container in accordance with local/regional/national/international regulations
HMIS
Health Ratings (0-4):
Health: 3

Flammability: 0
Physical: 1

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Family:Ceramic
Additional Names:
Gallium(II) sulfide, Gallium monosulfide
Gallium sulfide(GaS):
Percentage: 100 wt%
CAS#: 12024-10-1
EC #: 234-688-0

SECTION 4. FIRST AID MEASURES

General Treatment:
Seek medical attention if symptoms persist.
Special Treatment: None
Important Symptoms:
Causes severe skin burns.
Causes serious eye damage.
Inhalation:
Remove victim to fresh air. Supply oxygen if breathing is difficult.
Ingestion:
Give one to two glasses of water and induce vomiting.
Never induce vomiting or give anything by mouth to an unconscious person.
Skin:
Wash affected area with mild soap and water. Remove any contaminated clothing.
Eyes:
Flush eyes with water, blinking often for several minutes.
Remove contact lenses if present and easy to do. Continue rinsing

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SECTION 5. FIREFIGHTING MEASURES

Flammability:
Non-flammable
Extinguishing Media:
Do not use water. Use extinguishing powder.
Spec. Fire Fighting Procedure:
Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes.
See section 10 for decomposition products.

SECTION 6. ACCIDENTAL RELEASE MEASURES

If Material Is Released/
Spilled:
Wear appropriate respiratory and protective equipment specified in special protection information.

Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal.
Take care not to raise dust.
Environmental Precautions:
Isolate runoff to prevent environmental pollution.

SECTION 7. HANDLING AND STORAGE

Handling Conditions:
Handle under protective gas.
Wash thoroughly after handling.
Storage Conditions:
Store in a cool dry place in a tightly sealed container.
Store under dry inert gas.
Store apart from materials and conditions listed in section 10.
Work/Hygienic
Maintenance:
Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.
Ventilation:
Provide sufficient ventilation to maintain concentration at or below threshold limit.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Permissible Exposure Limits: N/A
Threshold Limit Value: N/A
SpecialEquipment: None
Respiratory Protection: Dust Respirator
Protective Gloves: Rubber gloves
Eye Protection:
Safety glasses or goggles, full face protection
Body Protection:
Protective work clothing. Wear close-toed shoes and long sleeves/pants.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Color: Yellow
Form: Powder
Odor: Odorless
Water Solubility: Reacts
Boiling Point: N/A
Melting Point: 965°C
Flash Point: N/A
Autoignition Temperature: N/A
Density: 3.87 g/cc
Molecular weight: 101.78 g/mol

SECTION 10. STABILITY AND REACTIVITY

Stability:
Stable under recommended storage conditions
Reacts With:
Acids, Water/moisture,
Oxidizing agents
Incompatible Conditions:
Water/moisture
Hazardous
Decomposition
Products:
Sulfur dioxide, Hydrogen sulfide, Sulfur oxides,
Metal oxide fume

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:
Eyes: Causes severe eye damage.
Skin: Causes severe skin burns.
Ingestion:
a strong corrosive effect on mouth and throat to the danger of perforation of esophagus and stomach.
Inhalation: May cause irritation
Chronic:
Gallium and gallium compo9unds may cause metallic taste, dermatitis and depression of the bone marrow function. Large doses may cause hemorrhagic nephritis.
Signs & Symptoms: N/A
Aggravated Medical Conditions: N/A
Median Lethal Dose: N/A
Carcinogen: N/A

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity: Low
Persistent Bioaccumulation Toxicity: No
Very Persistent, Very Bioaccumulative: No
Notes: N/A

SECTION 13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state, national, and international regulations.

SECTION 14. TRANSPORT INFORMATION

Hazardous:
Hazardous for transportation.
Hazard Class:
8 Corrosive substances.

Packing Group: II
UN Number: UN3260
Proper Shipping Name:
Corrosive solid, acidic, inorganic, n.o.s. (Gallium sulfide)

SECTION 15. REGULATORY INFORMATION

Sec 302 Extremely Hazardous: No
Sec 304 Reportable Quantities: N/A
Sec 313 Toxic Chemicals: No

SECTION 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.