



XI'AN FUNCTION MATERIAL GROUP CO., LTD
Material Safety Data Sheet
Gallium Selenide

1. Product and Company Identification

Trade Name:	Gallium Selenide
Chemical Formula:	GaSe
Manufacturer/Supplier:	XI'AN FUNCTION MATERIAL GROUP CO., LTD
Street:	No. 69, Gazelle Valley, High-Tech Zone
City:	XI'AN
State:	Shaanxi
Zip Code:	710077
Country:	China
Tel #:	+86-29-88993870/+86-13519132051

2. Hazards Identification

Signal Word:

Danger



Hazard Statements:

H290: May be corrosive to metals.
H301+H331: Toxic if swallowed or if inhaled.
H314: Causes severe skin burns and eye damage.
H335: May cause respiratory irritation
H373: May cause damage to organs through prolonged or repeated exposure.
H413: May cause long lasting harmful effects to aquatic life.
H319 Causes serious eye irritation.

Precautionary Statements:

P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P264: Wash skin thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P273: Avoid release to the environment.
P301+P310+P330: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.
P304+P340+P311: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician.
P314: Get Medical advice/attention if you feel unwell.
P403+P233: Store in a well ventilated place. Keep container tightly closed.
P390: Absorb spillage to prevent material damage.
P405: Store locked up.
P406: Store in a corrosive resistant container with a resistant inner liner.
P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

HMIS Health Ratings (0-4):

Health:	3
Flammability:	1
Physical:	0

3. Composition

Chemical Family:	Inorganic
Additional Names:	N/A

Gallium Selenide (GaSe):	
Percentage:	0-100 wt%
CAS #:	12024-11-2
EC #:	234-689-6

4. First Aid Procedures

General Treatment:	Seek medical attention if symptoms persist.
Special Treatment:	None
Important Symptoms:	None

Inhalation:	Remove victim to fresh air. Supply oxygen if breathing is difficult. Seek medical attention.
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Ingestion:	Give one to two glasses of water. Seek medical attention.
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Skin:	Wash affected area with mild soap and water. Remove any contaminated clothing. Seek medical attention.
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Eyes:	Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention.
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5. Firefighting Measures

Flammability:	Non-flammable, except as powder
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Extinguishing Media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
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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.
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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.
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Environmental Precautions:	Isolate runoff to prevent environmental pollution.
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7. Handling and Storage

Handling Conditions:	Wash thoroughly after handling.
Storage Conditions:	Store in a cool dry place in a tightly sealed container. 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.

8. Exposure Controls and Personal Protection

Permissible Exposure Limits:	0.2 mg/m ³ as Se, long-term value
Threshold Limit Value:	0.2 mg/m ³ as Se, long-term value
Special Equipment:	None
Respiratory Protection:	Dust Respirator
Protective Gloves:	Rubber gloves
Eye Protection:	Safety glasses or goggles
Body Protection:	Protective work clothing. Wear close-toed shoes and long sleeves/pants.

9. Physical and Chemical Characteristics

Color	N/A
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Odor:	N/A
Water Solubility:	N/A
Boiling Point:	N/A
Melting Point:	960 °C
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	5.03 g/cc
Molecular weight:	148.68 g/mol

10. Reactivity

Stability:	Stable under recommended storage conditions
Reacts With:	Oxidizing agents, acids, carbides, amides, metals
Incompatible Conditions:	Moist air, excessive heat
Hazardous Decomposition Products:	Metal oxide fume

11. Toxicological Information

Potential Health Effects:

Eyes:	Causes serious eye damage
Skin:	May cause irritation
Ingestion:	Toxic if swallowed
Inhalation:	May cause irritation
Chronic:	N/A

Signs & Symptoms:

Product is corrosive. Possible perforation of stomach, esophagus, ingestion can cause severe swelling, severe damage to delicate tissues and danger of perforation.

Aggravated Medical Conditions:

N/A

Median Lethal Dose:

6700 mg/kg for as Se rat by mouth

Carcinogen:

N/A

12. Ecological Information

Aquatic Toxicity:

LC50- Daphnia magna (Water Flea)- 0.43 mg/l- 48 hr.
EC50-Pseudokirchneriella subcapitata-99 mg/l- 72 hr.

Persistent Bioaccumulation Toxicity:

N/A

Very Persistent, Very Bioaccumulative:

N/A

Notes:

N/A

13. Disposal Considerations

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

14. Transportation Data

Hazardous:

Hazardous for transportation



Hazard Class:

6.1 Poisonous Material

Secondary Hazard Class:

8. Corrosives

Packing Group:

II

UN Number:

UN 3290

Proper Shipping Name:

Toxic solid, corrosive, inorganic, n.o.s (Gallium Selenide)

15. Regulatory Information

Sec 302 Extremely Hazardous:

N/A

Sec 304 Reportable Quantities:

N/A

Sec 313 Toxic Chemicals:

Yes

16. Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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11/13/2018

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