

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

## Silver

1. Product and Company Identification		
Trade Name:	Silver	
Chemical Formula:	Ag	
Recommended Use:	Scientific research and development	
Manufacturer/Supplier:	XI'AN FUNCTION MATERIAL GROUP CO., LTD	
Street:	No. 69, Gazelle Valley, High-Tech Zone	
City:	XI'AN	
State:	Shannxi	
Zip Code:	710077	
Country:	China	
Tel #:	+86-29-88993870/+86-13519132051	
	2. Hazards Identification	
Signal Word:	None	
Hazard Statements:	None	
Precautionary Statements:	None	
HMIS Health Ratings (0-4):		
Health:		
Flammability:	0	
Physical:		
	3. Composition	
Chemical Family:	Metal	
Additional Names:	None	
Silver (Ag):		
Percentage:	100 wt%	
CAS #:	7440-22-4	
EC #:	231-131-3	
	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.	
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	

5. Firefighting Measures Flammability: Non-flammable Do not use water for metal fires – use CO<sub>2</sub>, sand, extinguishing powder. Extinguishing Media: 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. 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. 7. Handling and Storage Handling Conditions: Wash thoroughly after handling. Store in a cool dry place in a tightly sealed container. Store apart from **Storage Conditions:** materials and conditions listed in section 10. Do not use tobacco or food in work area. Wash thoroughly before Work/Hygienic Maintenance: 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: 0.01 mg/m<sup>3</sup> as Ag metal and soluble compounds, long-term value Threshold Limit Value: 0.1 mg/m<sup>3</sup> as Ag metal: dust and fume, long-term value Special Equipment: None Respiratory Protection: **Dust Respirator** Protective Gloves: Rubber gloves Eve Protection: Safety glasses or goggles **Body Protection:** Protective work clothing. Wear close-toed shoes and long sleeves/pants. 9. Physical and Chemical Characteristics Color Silver-colored Form: Powder, Granules, Pellets, Sputtering target, Custom parts **Odorless** Odor: Water Solubility: Insoluble **Boiling Point:** 2210 °C Melting Point: 961.8 °C Flash Point: N/A Autoignition Temperature: N/A Density: 10.5 g/cc Molecular weight: 107.868 g/mol

10. Reactivity

Stability: Stable under recommended storage conditions

Reacts With: Oxidizing agents

Incompatible Conditions: None

Hazardous Decomposition Products: Silver Oxides, Metal oxide fume

11. Toxicological Information

Potential Health Effects:

Eyes:May cause irritationSkin:May cause irritationIngestion:May cause irritationInhalation:May cause irritation

Chronic: N/A

Signs & Symptoms: N/A
Aggravated Medical Conditions: N/A

Median Lethal Dose: N/A

Carcinogen: N/A

12. Ecological Information

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

Very Persistent, Very Bioaccumulative: Notes:

Very toxic to aquatic life.

May cause long lasting harmful effect on aquatic life.

Do not allow material to be released to the environment without proper

governmental permits.

Do not allow product to reach any water sources.

Danger to drinking water if even extremely small quantities leak into

the ground.

Also poisonous for fish and plankton in water bodies.

Do not allow undiluted product or large quantities to reach ground

water, water course or sewage system. Avoid transfer into the environment.

13. Disposal Considerations

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

14. Transportation Data

Hazardous: Hazardous for transportation as powder only.

Hazard Class: 9 Miscellaneous dangerous substances and articles

Packing Group: III UN Number: UN3077

Proper Shipping Name: Environmentally hazardous substances, solid, n.o.s. (Silver)

	15. Regulatory Information	
Sec 302 Extremely Hazardous:	No	
Sec 304 Reportable Quantities:	1 lb (0.454 kg)	
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.

Document Last Revised: 09/23/2017