



XI'AN FUNCTION MATERIAL GROUP CO., LTD
Material Safety Data Sheet
Silver Nickel Alloy

1. Product and Company Identification

Trade Name: Silver nickel
Chemical Formula: Ag/Ni
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:

Danger



Hazard Statements:

H228 Flammable solid powder
H317 May cause allergic skin reaction
H351 Suspected of causing cancer
H372 Causes damage to lungs, kidneys, and liver through prolonged or repeated inhalative exposure.

Precautionary Statements:

P210 Keep away from sparks/heat. No smoking.
P241 Use explosion-proof equipment
P260 Do not breathe dust/fume
P302+P352 If on skin: wash with plenty of water

HMIS Health Ratings (0-4):

Health: 1
Flammability: 0 (3 if powder)
Reactivity: 1

3. Composition

Chemical Family: Metal alloy
Additional Names: N/A

Silver (Ni):

Percentage: 0-100 wt%
CAS #: 7440-22-4
EC #: 231-131-3

Nickel (Ni):

Percentage: 0-100 wt%
CAS #: 7440-02-0
EC #: 231-111-4

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 ten minutes.

5. Fire and Explosion Hazards Data

Flammability:	Non-flammable, except as powder
Flash Point:	N/A
Autoignition Temperature:	N/A
Extinguishing Media:	Do not use water for metal fires. Use special powder, sand, CO2
Spec. Fire Fighting Procedure:	Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes.

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.
Storage Conditions:	Store in a cool dry place in a tightly sealed container.
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 TLV.

8. Exposure Controls and Personal Protection

Permissible Exposure Limits:	1.0 mg/m ³ as Nickel, long-term (USA)
Threshold Limit Value:	1.5 mg/m ³ as Nickel, long-term(USA)
Special Equipment:	None
Respiratory Protection:	Dust Respirator, NIOSH approved
Protective Gloves:	Rubber gloves
Eye Protection:	Safety glasses / goggles
Body Protection:	Protective work clothing. Wear close-toed shoes and long sleeves/pants.

9. Physical and Chemical Characteristics

Color	Metallic grey
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Odor:	Odorless
Water Solubility:	Insoluble
Boiling Point:	N/A
Melting Point:	~1700 °C, forms miscibility gap
Density:	~9-10 g/cc
Molecular weight:	N/A

10. Reactivity

Stability:	Stable under recommended storage conditions
Reacts With:	Halogens, Oxidizing agents
Incompatible Conditions:	Excessive heat, sparks
Haz. Decomposition Products:	Metal oxide fume

11. Toxicological Information

Potential Health Effects:	
Eyes:	Causes irritation
Skin:	May cause allergic reaction
Ingestion:	May cause irritation
Inhalation:	May cause irritation
Chronic:	Causes damage to the lung, the kidneys and the liver through prolonged or repeated exposure by inhalation.
Routes of Entry:	Inhalation
Target Organs:	Lung, the kidneys and the liver
Signs & Symptoms of Exposure:	N/A
Medical Conditions Aggravated by Exposure:	N/A
Median Lethal Dose:	N/A
Carcinogen:	Suspected of causing cancer.
IARC-2B	Possibly carcinogenic to humans: limited evidence in humans in the absence of sufficient evidence in experimental animals.
NTP-R	Reasonably anticipated to be a carcinogen: limited evidence from studies in humans or sufficient evidence from studies in experimental animals.
ACGIH A5:	Not suspected as a human carcinogen

12. Ecological Information

Ecological data is not available.

13. Disposal Considerations

Dispose of in accordance with local, state and federal regulations.

14. Transportation Data

Hazardous: Hazardous as powder, 10% nickel or greater:



Hazard Class: 4.1 Flammable solids, self-reactive substances and solid desensitized explosives.

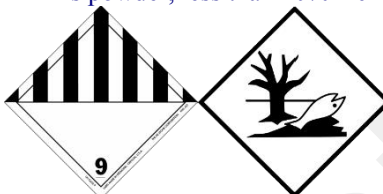
Packing Group: II

UN Number: UN3089

Proper Shipping Name: Metal powders, flammable, n.o.s. (nickel silver powder)

DOT Reportable Quantities: 100 lbs (45.4 kg)

Hazardous: As powder, less than 10% nickel:



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 nickel alloy)

15. Regulatory Information

Sec 302 Extremely Hazardous: No

Sec 304 Reportable Quantities: N/A

Sec 313 Toxic Chemicals: Components

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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