



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

Gold chloride

1. Product and Company Identification

Trade Name: Gold chloride
Chemical Formula: AuCl₃ (structurally Au₂Cl₆)
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: Warning



Hazard Statements: H314: Causes severe skin burns and eye damage

Precautionary Statements: P260: Do not breathe dust/fume/vapor
P301+P361+P353: If swallowed: rinse mouth. Do not induce vomiting.
P303+P361+P353: If on skin or hair: take off immediately all contaminated clothing. Rinse skin with water.
P305+P351+P338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if easy to do.
P390: Absorb spillage to prevent material damage
P406: Store in a corrosive resistant container with a resistant inner liner

HMIS Health Ratings (0-4):
Health: 3
Flammability: 0
Physical: 1

3. Composition

Chemical Family: Salt
Additional Names: Gold(III) chloride, Auric chloride, Gold trichloride

Gold chloride (AuCl₃):
Percentage: 100 wt%
CAS #: 13453-07-1
EC #: 236-623-1

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:	Seek medical attention.
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
Extinguishing Media:	No special restrictions – use suitable extinguishing agent for surrounding material and type of fire.
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.
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:	None
Threshold Limit Value:	None
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	Purple to Red
	Gold to yellow when hydrated
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Odor:	Odorless
Water Solubility:	6800 g/ml
Boiling Point:	180 °C
Melting Point:	sublimes
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	3.8 g/cc
Molecular weight:	303.325 g/mol

10. Reactivity

Stability:	Stable under recommended storage conditions
Reacts With:	Bases, Oxidizing agents, Water, Light
Incompatible Conditions:	Moisture, Light
Hazardous Decomposition Products:	Metal oxide fume, Hydrogen chloride

11. Toxicological Information

Potential Health Effects:	
Eyes:	Causes serious burns
Skin:	Causes severe burns
Ingestion:	Strong corrosive effect on mouth and throat; danger of perforation esophagus and stomach
Inhalation:	Causes severe burns
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:	Moderate
Persistent Bioaccumulation Toxicity:	No
Very Persistent, Very Bioaccumulative:	No
Notes:	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.



Hazard Class: 8 Corrosive substances
Packing Group: III
UN Number: UN3260
Proper Shipping Name: Corrosive solid, acidic, inorganic, n.o.s. (Gold(III) chloride)
Segregation Group: Acids

15. Regulatory Information

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

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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