



SECTION 1: Product Identification

Chemical Name:	Gold (III) chloride, 99% (99.9%-Au)
Product Number:	602
CAS Registry Number:	13453-07-1
Formula:	AuCl ₃
EINECS Number:	231-623-1
Chemical Family:	metal halide
Synonym:	Auric trichloride

SECTION 2: Composition and Information on Ingredients

Ingredient	CAS Number	Percent	ACGIH (TWA)	OSHA (PEL)
Title Compound	13453-07-1	100	no data	no data

SECTION 3: Hazards Identification

Emergency Overview:	Irritating to skin, eyes and respiratory tract. Exposure to gold compounds may damage kidney function and reduce blood cell count.
Primary Routes of Exposure:	Ingestion, inhalation, skin, eyes
Eye Contact:	Causes severe irritation to the eyes.
Skin Contact:	Causes severe irritation of the skin.
Inhalation:	Inhalation of choking fumes results in severe irritation of the respiratory tract, chemical pneumonitis and pulmonary edema.
Ingestion:	May cause burns to the gastrointestinal system. Gold compounds may lead to dermatitis, metallic taste, and convulsions.
Acute Health Effects:	Irritating to skin, eyes and respiratory tract. May cause impairment of kidney and bone marrow function, abdominal cramps, vomiting, bloody diarrhea, weakness, and convulsions.
Chronic Health Effects:	Prolonged exposure to gold compounds may lead to reduced red and white blood cell generation.
NTP:	No



IARC:	No
OSHA:	No
SECTION 4: First Aid Measures	
Eye Exposure:	Immediately flush the eyes with copious amounts of water for at least 10-15 minutes. A victim may need assistance in keeping their eye lids open. Get immediate medical attention.
Skin Exposure:	Wash the affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.
Inhalation:	Remove the victim to fresh air. Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, or pain. In such cases seek immediate medical assistance.
Ingestion:	Seek medical attention immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.
SECTION 5: Fire Fighting Measures	
Flash Point:	not applicable
Autoignition Temperature:	none
Explosion Limits:	none
Extinguishing Medium:	none required
Special Fire Fighting Procedures:	If this product is involved in a fire, fire fighters should be equipped with a NIOSH approved positive pressure self-contained breathing apparatus and full protective clothing.
Hazardous Combustion and Decomposition Products:	If involved in a fire this material may emit toxic chlorine and hydrochloric acid fumes.
Unusual Fire or Explosion Hazards:	No unusual fire or explosion hazards.
SECTION 6: Accidental Release Measures	
Spill and Leak Procedures:	To avoid raising dust, small spills may be mixed with diatomaceous earth, sand, vermiculite, or other suitable inert material and swept up.



SECTION 7: Handling and Storage

Handling and Storage: Store material in a tightly sealed bottle away from moisture. If possible, handle in an efficient fume hood. Prolonged exposure to the atmosphere may lead to degradation of the product.

SECTION 8: Exposure Controls and Personal Protection

Eye Protection: Always wear approved safety glasses when handling a chemical substance in the laboratory.

Skin Protection: Wear appropriate chemical resistant gloves and protective clothing.

Ventilation: Material may form a fine dust. If possible, handle the material in an efficient fume hood.

Respirator: If ventilation is not available a respirator should be worn. The use of respirators requires a Respirator Protection Program to be in compliance with 29 CFR 1910.134.

Additional Protection: No additional protection required.

SECTION 9: Physical and Chemical Properties

Color and Form: maroon xtl.

Molecular Weight: 303.33

Melting Point: 254°C dec.

Boiling Point: no data

Vapor Pressure: not applicable

Specific Gravity: no data

Odor: none

Solubility in Water: very soluble

SECTION 10: Stability and Reactivity

Stability: moisture sensitive, light sensitive

Hazardous Polymerization: no hazardous polymerization

Conditions to Avoid: prolonged exposure to moisture and light sources

Incompatibility: water, alcohols, strong bases, and active metals.



Decomposition Products:	with moisture: hydrogen chloride, chlorine, and gold and gold (I) chloride.
SECTION 11: Toxicological Information	
RTECS Data:	Subcutaneous (rat); TDLo: 22106 ug/kg. Intratesticular (rat); TDLo: 5527 ug/kg. Subcutaneous (mouse); TDLo: 22106 ug/kg. Human Lymphocyte: Unscheduled DNA synthesis: 6 mg/L.
Carcinogenic Effects:	No data
Mutagenic Effects:	Insufficient data
Tetratogenic Effects:	Insufficient data
SECTION 12: Ecological Information	
Ecological information:	No information available
SECTION 13: Disposal Considerations	
Disposal:	Dispose of according to local, state and federal regulations.
SECTION 14: Transportation	
Shipping Name (CFR):	Non-hazardous
Hazard Class (CFR):	NA
Additional Hazard Class (CFR):	NA
Packaging Group (CFR):	NA
UN ID Number (CFR):	NA
Shipping Name (IATA):	Non-hazardous
Hazard Class (IATA):	NA
Additional Hazard Class (IATA):	NA
Packaging Group (IATA):	NA



UN ID Number (IATA):	NA
SECTION 15: Regulatory information	
TSCA:	Listed in the TSCA inventory.
SARA (Title 313):	Title compound not listed.
Second Ingredient:	None
Third Ingredient:	None