

MATERIAL SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Material Name: Gold Chloride
Catalogue Number: C106
Other Names: Chloroauric acid trihydrate; Auric chloride.
Recommended Use: Highly purified gold compound for the preparation of colloidal gold solutions.

Supplier Name: ProSciTech
Street Address: 1/11 Carlton Street, Kirwan, Qld. 4817 Australia
Telephone Number: (07) 4773 9444 - 8:30am – 5:00pm, Monday to Friday (excluding Public Holidays)
Emergency Contact: (07) 4773 9444 - 8:30am – 5:00pm, Monday to Friday (excluding Public Holidays)

SECTION 2 - HAZARDS IDENTIFICATION

Hazard Classification:

Hazardous according to the criteria for Classifying Hazardous Substances [NOHSC:1008].

Hazardous and/or Dangerous Nature:

HAZARDOUS SUBSTANCE. DANGEROUS GOODS.

Risk Phrases:

R38 Irritating to skin.

R41 Risk of serious damage to eyes.

Safety Phrases:

S24/25 Avoid contact with skin and eyes.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

Refer to Section 15 for Poisons Schedule.

SECTION 3 - COMPOSITION /INFORMATION ON INGREDIENTS

Pure Substance (Proportion 100%):

Chemical Identity: Gold Chloride
Common Name(s): Chloroauric acid trihydrate; Auric chloride.
CAS Number: 16961-25-4

SECTION 4 - FIRST AID MEASURES

Ingestion: Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention. If victim is fully conscious, give a Cupful of water.

Inhalation: Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

Eye Contact: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.

Skin Contact: After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention.
 If serious contact is made: Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

First Aid Facilities: Eyebath/eyewash, Safety shower & general washroom facilities.

Medical Attention & Special Treatment:
 Not available.

Additional Information:
 Not available.

SECTION 5 - FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Use extinguishing media suitable for the surrounding fire.

Hazards from Combustion Products:

Not available.

Precautions for Fire Fighters:

As in any fire wear the appropriate protective equipment to suit the situation.

Hazchem Code: Not available.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Emergency Procedures:

Wear appropriate protective equipment refer to Section 8.

Containment & Clean up:

SMALL SPILL:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

LARGE SPILL:

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow through the sanitary system.

SECTION 7 - HANDLING & STORAGE

Precautions for Safe Handling:

Do not breathe dust. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes

Precautions for Safe Storage:

Store in a cool place and from sunlight. Use shelves or cabinets sturdy enough to bear the weight of the chemicals. Be sure that it is not necessary to strain to reach materials, and that shelves are not overloaded.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards: No exposure standard allocated.

Biological Limit Values: No biological limit allocated.

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Facilities should be equipped with an eyewash facility and safety shower.

Personal Protective Equipment:

Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

IN CASE OF A LARGE SPILL:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling the product.

SECTION 9 - PHYSICAL & CHEMICAL PROPERTIES

Appearance:	Crystals, golden yellow (yellow-brown range).
Odour:	Not available.
pH:	Not available.
Vapour pressure (mm of Hg at °C):	Not available.
Vapour density:	Not available.
Boiling point/range (°C):	Not available.
Freezing/melting point (°C):	Not available.
Solubility:	Soluble in cold water, hot water.
Specific gravity or density:	3.9 (Water = 1)
Flash Point:	Not available.
Flammable (explosive) limits:	Not available.
Ignition temperature:	Not available.
Chemical formula:	HAuCl ₄ .3H ₂ O
Molecular weight:	393.83 g/mole

SECTION 10 - STABILITY AND REACTIVITY

Chemical stability:	Stable under normal conditions of use.
Conditions to avoid:	Not available.
Incompatible Materials:	Not available.
Hazardous Decomposition Products:	Not available.
Hazardous Reactions:	Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION**Exposure and Health Effects:**

Irritation of the eyes/skin. Very hazardous in case of inhalation (irritant). Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

Ingestion:

Very hazardous in case of ingestion – symptoms unknown, if you feel ill seek immediate medical attention.

Inhalation:

Very hazardous in case of inhalation (irritant). Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

Eye Contact:

Very hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching

Skin Contact:

Very hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Human/Animal data: Not available.

Carcinogenic Category: Not classified as a Carcinogen by the IARC.

Other Carcinogenic Information: Not available.

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: Not available.

Persistence and degradability: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. The products of degradation are more toxic.

Mobility: Not available.

Additional Information: Not available.

SECTION 13 - DISPOSAL CONSIDERATIONS**Disposal Methods:**

Recycle to process, if possible. Be sure to comply with local, state and federal regulations.

Special Precautions/Additional Informational:

Not available.

SECTION 14 - TRANSPORT INFORMATION

UN Number: UN1759

UN Proper Shipping Name: Corrosive solid, n.o.s. (Gold Chloride)

Class and Subsidiary risk: 8

Packing Group: PG III

Special Precautions for User: Not available.

Hazchem Code: Not available.

SECTION 15 - REGULATORY INFORMATION

Poison Schedule Number: None Allocated.

SECTION 16 - OTHER INFORMATION

Date of preparation of MSDS: July 11

Comments:**List of Publications referenced when creating this MSDS;**

- Hazardous Substances Information System Consolidated Lists: Safe Work Australia.
- APPROVED CRITERIA FOR CLASSIFYING HAZARDOUS SUBSTANCES [NOHSC:1008(2004)] 3rd Edition: National Occupational Health and Safety Commission.
- Dangerous Goods - Initial Emergency Response Guide (SAA/SNZ HB76:1997).
- IATA Dangerous Goods Regulations.
- Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)].
- Australia Standard for the Uniform Scheduling of Drugs and Poisons [SUSPD] (Australian Government Department of Health and Ageing).

This Material Safety Data Sheet (MSDS) has been prepared in compliance with the National code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC:2011(2003)]. It is the user's responsibility to determine the suitability of this information for adoption of necessary safety precautions. The information published in this MSDS has been compiled from the publications listed in Section 16: to the best of our ability and knowledge these publications are considered accurate. We reserve the right to revise Material Safety Data Sheets as new information becomes available. Copies may be made for non-profit use.

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