



# Material Safety Data Sheet

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## AUROTHIOGLUCOSE

Catalog Number: 1045508

Package Size: 100 mg

Revision Date:

February 17, 2004

### SECTION 1 - IDENTIFICATION

**Common Name:** Aurothioglucose

**Formula:** C<sub>6</sub>H<sub>11</sub>AuO<sub>5</sub>S

**Synonym:** 1-Aurothio-d-glucopyranose

**Chemical Name:** Gold, (1-thio-D-glucopyranosato)-

**CAS Number:** 12192-57-3

**RTECS Number:** MD6475000

**Chemical Family:** Monosaccharide

**Therapeutic Category:** Antirheumatic

### SECTION 2 - INGREDIENT INFORMATION

<u>Principle Components</u>	<u>Percent</u>	<u>Exposure Limits</u>
Aurothioglucose	Pure Material	n/f

### SECTION 3 - HEALTH HAZARD INFORMATION

**Usual Adult Dose:** The usual adult dose (by intramuscular injection) of aurothioglucose is 10 mg the first week, 25 mg the second and third weeks, then 25 to 50 mg once a week until a total cumulative dose of 800 mg to 1 gram has been given. Subsequent 25 to 50 mg doses may continue at 2 to 4 week intervals.

**Adverse Effects:** Adverse effects may include itching, skin rash, reddened skin, ulcers, sores or white spots in mouth and throat, bleeding, sore and swollen gums, irritation or soreness of tongue, cloudy urine, and metallic taste. Possible allergic reaction to material if inhaled, ingested or in contact with skin.

**Overdose Effects:** n/f

**Acute:** Possible eye, skin, gastrointestinal and/or respiratory tract irritation.

**Chronic:** Possible hypersensitization, blood disorders, and kidney function impairment.

**Inhalation:** May cause irritation. Remove to fresh air.

**Eye:** May cause irritation. Flush with copious quantities of water.

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**Skin:** May cause irritation. Flush with copious quantities of water.

**Ingestion:** May cause irritation. Flush out mouth with water. Material is absorbed erratically following ingestion.

**Medical Conditions  
Aggravated by Exposure:**

Hypersensitivity to material or history of adverse effects associated with gold therapy, severe debilitation, systemic lupus erythematosus, a history of or current blood disorder, Sjogren Syndrome in rheumatoid arthritis, urticaria, and eczema.

**Cross Sensitivity:** Persons sensitive to gold or other heavy metals may be sensitive to this material also.

**Pregnancy Comments:** Pregnancy studies in humans have not been done; however, studies in animals have shown parenteral and oral doses of gold compounds to cause serious birth defects and developmental abnormalities in rat and rabbit fetuses.

**Pregnancy Category:** C

## SECTION 4 - FIRST AID MEASURES

**General:** Remove from exposure. Remove contaminated clothing. Persons developing serious hypersensitivity (anaphylactic) reactions must receive immediate medical attention. If person is not breathing give artificial respiration. If breathing is difficult give oxygen. Obtain medical attention.

**Overdose Treatment:** Treatment of adverse effects should be symptomatic and supportive and may include the following:

1. Administer appropriate therapy, such as topical adrenocorticoids, soothing lotions, or local anesthetics, for relief of mild to moderately severe skin or mucous membrane reactions.
2. Administer systemic glucocorticoids for severe or generalized dermatitis or stomatitis.
3. Administer high doses of glucocorticoids if required for severe pulmonary or other complications. If symptoms do not improve with high-dose glucocorticoid treatment, or if significant glucocorticoid-induced adverse effects develop, use of a chelating agent such as dimercaprol (BAL) to enhance gold excretion may be considered. However, the efficacy of BAL has not been established. Also, caution in use of BAL is recommended because of its toxicity.
4. Administer other supportive treatment as required for specific complications. [USP DI 2003]

## SECTION 5 - TOXICOLOGICAL INFORMATION

**Oral Rat:** LD50: n/f

**Oral Mouse:** LD50: n/f

**Irritancy Data:** n/f

**Target Organ(s):** Skin and Kidneys.

**Listed as a Carcinogen?** NTP: No IARC: No OSHA: No

**Other:** Renal adenoma and adenocarcinoma have been reported in rats with prolonged administration of frequent, high doses of parenteral gold compounds (2 mg per kilogram weekly for 45 weeks followed by 6 mg per kg daily for 47 weeks in one study; 3 mg per kg or 6

## SECTION 6 - FIREFIGHTING MEASURES

**Flash Point:** n/f

**Upper Flammable Limit:** n/f

**Auto-Ignition Temperature:** n/f

**Lower Flammable Limit:** n/f

**Extinguisher Media:** Water spray, dry chemical, carbon dioxide or foam as appropriate for surrounding fire and materials.

**Fire and Explosion Hazards:** This material is assumed to be combustible. As with all dry powders it is advisable to ground mechanical equipment in contact with dry material to dissipate the potential buildup of static electricity.

**Firefighting Procedures:** As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing equipment and protective clothing.

**SECTION 7 - PHYSICAL HAZARDS****Conditions to Avoid:** Avoid exposure to light.**Incompatibilities:** Oxidizing agents. Aqueous solutions are unstable on long standing.**Decomposition Products:** When heated to decomposition material emits toxic fumes of SO<sub>x</sub>. Emits toxic fumes under fire conditions.**Stable?** Yes                      **Hazardous Polymerization?** No**SECTION 8 - HANDLING / SPILL / DISPOSAL MEASURES****Handling:** As a general rule, when handling USP Reference Standards avoid all contact and inhalation of dust, mists, and/or vapors associated with the material. Wash thoroughly after handling.**Storage:** Store in tight, light-resistant container as defined in the USP-NF. This material should be handled and stored per label instructions to ensure product integrity.**Spill Response:** Wear approved respiratory protection, chemically compatible gloves and protective clothing. Wipe up spillage or collect spillage using a high efficiency vacuum cleaner. Avoid breathing dust. Place spillage in appropriately-labelled container for disposal. Wash spill site.**Disposal:** Dispose of waste in accordance with all applicable Federal, State and local laws.**SECTION 9 - EXPOSURE CONTROLS / PERSONAL PROTECTION****Respiratory Protection:** When working with small quantities in a well-ventilated area, respiratory protection may not be required. The use of an approved dust mask is recommended.**Ventilation:** No special ventilation requirements.**Gloves:** Rubber**Eye Protection:** Safety Glasses**Protective Clothing:** Protect exposed skin.**SECTION 10 - PHYSICAL AND CHEMICAL PROPERTIES****NOTE: The data reported below is general information, and is not specific to the USP Reference Standard Lot provided!****Appearance and Odor:** Yellow powder; odorless or practically odorless.**Melting Point:** n/f**Solubility in Water:** Freely soluble**Vapor Density:** n/f**Boiling Point:** n/f**Evaporation Rate:** n/f**Specific Gravity:** n/f**Reactivity in Water:** n/f**Vapor Pressure:** n/f**% Volatile by Volume:** n/f