

Material Safety Data Sheet

Gold

Revision Date: 02/04/2009

Date Issued: 11/24/2006

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY / UNDERTAKING

Product name	Gold powder, 99.9%
Product code	NM-0032-HP
Supplier	IoLiTec Ionic Liquids Technologies GmbH Ferdinand-Porsche-Straße 5/1 D-79211 Denzlingen Germany
Telephone	+49 (0)7666 - 9129572
Fax	+49 (0)7666 - 9129345
Emergency telephone	+49 (0)179-5322578
Email	msds@iolitec.de

2 HAZARDS IDENTIFICATION

Immediate concerns	WARNING! Can cause eye and skin irritation. Avoid contact with skin, eyes and clothing. Wear protective goggles and gloves when handling this material. Wash thoroughly after handling.
Eyes	Causes irritation.
Skin	Can cause irritation.
Inhalation	Causes irritation.
Primary routes of entry	Eyes, skin.
Target organs	Eyes, skin.

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3 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient name	Gold, 99.9%
CAS No.	7440-57-5
Empirical Formula	Au
Molecular weight	196.97 amu

Potential health effects

4 FIRST AID MEASURES

General	Contaminated clothing should be removed and washed before being reused.
Inhalation	Move the exposed person to fresh air at once. If respiratory problems, artificial respiration/oxygen.
Ingestion	Immediately rinse mouth and provide fresh air. Do not induce vomiting. Get medical attention immediately.
Skin	Wash the skin immediately with soap and water.
Eyes	Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

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5 FIRE FIGHTING MEASURES

Extinguishing media Use: Water spray, fog or mist. Carbon dioxides (CO₂). Dry chemicals, sand, dolomite etc.

Special fire fighting procedures No special procedures required.

Unusual fire & explosion hazards

Protective measures in fire Wear self-contained breathing apparatus as combustion may produce hazardous fumes.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions during spill Wear protective clothing and avoid inhalation of metal powder, fume and vapor as well as skin or eye contact.

Precautions to protect environment

Avoid washing into water courses. Avoid contaminating public drains or water supply.

Spill cleanup methods

Avoid contact with skin or inhalation of spillage, dust or vapor, Avoid dust formation. Collect and reclaim or dispose in sealed containers in license waste. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate.

7 HANDLING AND STORAGE

Usage precautions

Keep away from heat, sparks and open flame. Do not use in confined spaces without adequate ventilation and/or respirator.

Storage precautions

Store at moderate temperatures in dry, well ventilated area.

Storage criteria

Chemical storage.

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8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Protective equipment	Safety goggles. Chemical resistant gloves. Protective clothing. Protective mask.
Process control measures	Provide eyewash station and safety shower. Use engineering controls to reduce air contamination to permissible exposure levels.
Ventilation	Provide adequate general and local exhaust ventilation.
Respirators	Use high efficiency particulate respirator with appropriate filter.
Other protection	

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Solid
Color	Dark brown.
Odor/taste	No characteristic odor.
Melting Point	1064 °C
Boiling Point	2808 °C

10 STABILITY AND REACTIVITY

Stability	No particular stability concerns.
Conditions to avoid	Gold plus ammonia may produce fulminate like compounds that explode when dried. Finely divided gold and strong hydrogen peroxide solution may explode.
Hazardous Decomposition Products	High temperatures generate: Corrosive gases/vapor/fumes of: Oxygen (O ₂).

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11 TOXICOLOGICAL INFORMATION

Ingestion	Harmful if swallowed.
Skin	May cause irritation and allergic reaction.
Eyes	May cause irritation and allergic reaction.

12 ECOLOGICAL INFORMATION

Environmental hazards	Avoid washing into water courses. Avoid contaminating public drains or water supply.
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13 DISPOSAL CONSIDERATIONS

Disposal method	Contact specialist disposal companies. Dispose of in accordance with Local Authority requirements. Recover and reclaim or recycle, if practical.
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14 TRANSPORT INFORMATION

General	Not classified as dangerous for transport purposes.
UN No.	0
Road transport notes	Not classified as dangerous for road transport.
Rail transport notes	Not classified as dangerous for rail transport.
Sea transport notes	Not classified as dangerous for sea transport.
Air transport notes	Not classified as dangerous for air transport.

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15 REGULATORY INFORMATION

Label for supply

Harmful.

Risk phrases

R: 22

Harmful if swallowed.

Safety phrases

S: 22

Do not breathe dust.

16 OTHER INFORMATION

DISCLAIMER

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPOSED TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. IOLITEC SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT. THIS INFORMATION RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED AND MAY NOT BE VALID FOR SUCH MATERIAL USED IN COMBINATION WITH ANY OTHER MATERIALS OR ANY PROCESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY HIMSELF AS TO THE SUITABILITY OF SUCH INFORMATION FOR HIS OWN PARTICULAR USE.

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