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REVISION N ^o .: 1	WORK PROCEDURE TASK: HAZARD DATA SHEET - GOLD
	DOCUMENT N ^o .: HDS 018

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SAFETY DATA SHEET

PRODUCT NAME: GOLD SPONGE

1. PRODUCT AND COMPANY IDENTIFICATION
<p>Identification of the preparation: Product name: Gold sponge Product code: AU METAL Chemical name: Gold Formula: Au Recommended uses: Decorative coating, Dental alloy, Electronics, Industrial applications, Jewelry, Laboratory applications. Company Identification: Impala Platinum Limited – Refineries Corner East Geduld Road & Cowles Street P O Box 222, Springs 1560, South Africa Tel.: +27 (0)11 360 3111, Fax: +27 (0)11 360 3202 www.implats.co.za jamie.welman@implats.co.za Emergency telephone no.: Impala Platinum Refineries +27 (0)11 360 3777 Poison Centre - Tygerberg Hospital, Belville, Cape +27 (0)21 931 6129</p>
2. HAZARD IDENTIFICATION
<p>Low toxicity</p> <p>WARNING</p> <p>Harmful - if swallowed, - in contact with skin, - if inhaled The product may cause adverse health effects with high-level dust generation, inhalation or prolonged skin contact.</p> <p>Additional Labeling: Each container should be labeled as follows: Before use read Safety Data Sheet If dissolved, ensure adequate enclosure or ventilation; do not breathe mists and avoid solution contact with eyes, skin and clothing – may cause sensitisation or allergic reaction If melted do not breathe furnace fume</p> <div style="text-align: right; margin-top: 20px;">  </div>

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3. COMPOSITION / INFORMATION ON INGREDIENTS

Major components:	Typical wt %:	CAS #: 7440-57-5
Gold	99.50-99.99%	EINECS Number: 231-165-9

4. FIRST AID MEASURES

Inhalation: Exposure is considered unlikely. Due to product form / nature of use, an inhalation hazard is not anticipated. Seek medical attention if irritation develops.

Ingestion: For advice, contact a Doctor or the Poisons Information Centre on +27-21-931-6129. Due to product form and application, ingestion is considered unlikely.

Skin: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Seek medical attention if irritation develops.

Eyes: Exposure is considered unlikely unless casing is damaged. Flush gently with running water. Seek medical attention if irritation develops.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.

Extinguishing media not be used: Not applicable

Special exposure hazards: May evolve toxic gases if strongly heated.

Special protective equipment for fire-fighters: None

NOTE: The Gold Sponge supplied by Impala Platinum is non-flammable and therefore **DOES NOT** present a fire hazard.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: If spilt (bulk) wear goggles and PVC or rubber gloves. Where a dust inhalation hazard exists (i.e. when used in large quantities) wear a Class P1 (particulate) respirator.

Environmental precautions: Not applicable.

Methods for cleaning-up: If spilled sweep up and reuse where possible.

7. HANDLING AND STORAGE

Handling: Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

Storage: Store in a cool, dry, well ventilated area, removed from oxidizing agents, acids, ammonia, ammonium hydroxide, hydrogen peroxide and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limit: No exposure standard(s) allocated.

Respiratory protection: Where an inhalation risk exists, wear: a Class P1 (Particulate) respirator. Where an inhalation risk exists, mechanical extraction ventilation is recommended.

Hand protection: Wear suitable gloves (cotton or leather gloves)

Eye protection: Wear dust-proof goggles.

Skin protection: Safety shoes, overalls or similar full-body work clothes should be worn and laundered daily. This protective clothing should not be worn at home.

Personal Hygiene: Practice good housekeeping and personal hygiene procedures. No eating, drinking or smoking in work area. Wash hands thoroughly before eating, drinking or smoking. Avoid ingestion, inhalation and skin and eye contact. Medical examinations, monitoring, record keeping and hygiene facilities are recommended.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Yellow Solid
Odour: Odourless
pH: Not applicable
Boiling point / boiling range: 2857°C; 5201°F
Melting point / melting range: 1064°C; 1937°F
Flash point: Not applicable
Flammability (solid): Non-flammable solid
Autoflammability: Not applicable
Explosive properties: Not applicable
Oxidizing properties: Not applicable
Vapour pressure: Unknown
Relative density: 19.3 g.cm³
Solubility : - hydrosolubility: Insoluble in water
liposolubility (solvent-oil): Insoluble in solvent-oil
Partition coefficient (n-octanol/water): Not applicable

10. STABILITY AND REACTIVITY

Chemical Stability: Stable under recommended conditions of storage.
Conditions to avoid: Exposure to high temperatures (>1000°C), sparks, open flames and other ignition sources.
Materials to avoid: Incompatible with oxidizing agents (eg. hypochlorite's), acids (eg. nitric acid), ammonia, ammonium hydroxide and hydrogen peroxide.
Hazardous decomposition products: May evolve toxic gases if heated to decomposition.

11. TOXICOLOGICAL INFORMATION

11.1 ACUTE TOXICITY

Ingestion: Ingestion is considered unlikely due to product form. Poorly absorbed and therefore considered non toxic.

11.2 SKIN CORROSION / IRRITATION

Low-irritant: Prolonged or repeated contact may result in mild irritation, rash and dermatitis.

11.3 SERIOUS EYE DAMAGE / IRRITATION

Irritant: Exposure considered unlikely. Due to product form and nature of use, the potential for exposure is reduced, but exposure may result in eye irritation, pain and redness.

11.4 RESPIRATORY OR SKIN SENSITISATION

Non-irritant: Exposure considered unlikely. Due to product form and nature of use, an inhalation hazard is not anticipated with normal use.

11.5 GERM CELL MUTAGENICITY

Repeated or prolonged exposure is not known to aggravate medical condition.

11.6 CARCINOGENICITY

Non-carcinogenic: Not identified as carcinogenic

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11.7 REPRODUCTIVE TOXICITY

Not available.

11.8 SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY – Single exposure

Not available.

11.9 SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY – Repeated exposure

Not available.

11.10 ASPIRATION HAZARD

Inhalation : Exposure considered unlikely. Due to product form and nature of use, an inhalation hazard is not anticipated with normal use.

Note: Potential Health Effects: Skin: Skin contact with this material in solid forms is not known to be hazardous. In finely-divided form, skin contact may produce localized irritation Inhalation: Dust may respiratory tract irritation by mechanical action. No significant acute or chronic effects are known from exposure by inhalation. Ingestion: Ingestion of this material in finely-divided form may produce gastric irritation, vomiting, abdominal pain, hemorrhage, diarrhea. Long term (chronic) ingestion may produce injury to the liver, kidney, spleen, pancreas, and brain. Health Conditions Aggravated by Exposure: Pre-existing pulmonary diseases (e.g. bronchitis, emphysema) may be aggravated by inhalation of this material as fumes.

12. ECOLOGICAL INFORMATION

Gold metal is not anticipated to cause adverse effects to animal or plant life if released to the environment in small quantities. The biodegradation of gold under aerobic conditions is expected to be very poor and there is no evidence to suggest it creates ecological problems when released into the environment. Since gold is insoluble, it is believed to have minimal bioaccumulation and bioavailability characteristics.

Gold metal may have the following effects:

12.1 Accumulation:

- **Persistence:** Unknown
- **Bioaccumulation potential:** Minimal bioaccumulation and bioavailability characteristics.
- **Biomagnification:** Unknown
- **Biodegradability:** The biodegradation of gold under aerobic conditions is expected to be very poor

12.2 Ecotoxicity:

- **Aquatic organisms:** Unknown
- **Soil organisms:** Unknown
- **Plants and terrestrial animals:** Unknown

12.3 Other adverse effects:

- **Ozone depletion potential:** Does not contain ozone depleting substances
- **Photochemical ozone creation potential:** Not applicable
- **Global warming potential:** Not applicable
- **Effects on waste water treatment plants:** Unknown

The environmental effects of Gold and its compounds have not been fully evaluated.

13. DISPOSAL CONSIDERATIONS

Disposer must comply with state and local laws. This material can be metallurgically recycled by Impala Platinum, South Africa, which is a pre-authorized facility for the environmentally sound recovery of metals.

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14. TRANSPORT INFORMATION

NOT REGULATED FOR TRANSPORT PURPOSES

Packing : In plastic bags sealed in tins which in turn are sealed in boxes

UN-Nr.: Not applicable

IMDG-Code: Not applicable

ICAO / IATA : Not applicable

RID / ADR : Not applicable

15. REGULATORY INFORMATION

United States: CERCLA: Not regulated

Canada:

EU/EC Classification:

16. OTHER INFORMATION :

Hazard Information References :

16.1 Chem Alert, Gold Metal, Powder and Pieces, John Morris Scientific PTY LTD

16.2 COTOX database; <http://cfpub.epa.gov/ecotox>

16.3 Lenntech: <http://www.lenntech.com/periodic/elements/au.htm#ixzz4QLJTXBY>

16.4 Science Lab. : <http://www.sciencelab.com/msds.php?msdsId=9924183>

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