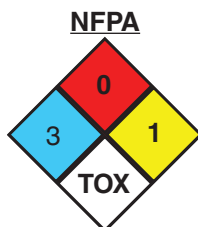


# MATERIAL SAFETY DATA SHEET

## Gold (I) Cyanide



### HMIS

HEALTH	3
FLAMMABILITY	0
REACTIVITY	1
PERSONAL PROTECTION	J

### 1. Product And Company Identification

#### Supplier

DF Goldsmith Chemical and Metal  
909 Pitner Avenue  
Evanston, IL 60202, USA

Telephone Number: 847-869-7800

FAX Number: 847-869-2531

E-mail: goldchem@aol.com

Web Site: www.dfgoldsmith.com

#### Manufacturer

DF Goldsmith Chemical and Metal  
909 Pitner Avenue  
Evanston, IL 60202, USA

Telephone Number: 847-869-7800

FAX Number: 847-869-2531

E-mail: goldchem@aol.com

Web Site: www.dfgoldsmith.com

#### Supplier Emergency Contacts & Phone Number

Chemtrac: 800-424-9300

#### Supplier Emergency Contacts & Phone Number

Chemtrac: 800-424-9300

Issue Date: 02/24/2006

Product Name: Gold (I) Cyanide

Chemical Name: Same as above

CAS Number: 506-65-0

Chemical Family: Platinum Group Metal

Chemical Formula: AuCN

MSDS Number: 79-228

Product Code: 79-228

#### Synonyms

None

### 2. Composition/Information On Ingredients

Ingredient Name	CAS Number	Percent Of Total Weight
Gold (I) Cyanide	506-65-0	88

### EMERGENCY OVERVIEW

Highly Toxic (USA) Toxic (EU).

Toxic by inhalation, in contact with skin and if swallowed.

#### Hazards Identification (Pictograms)



# MATERIAL SAFETY DATA SHEET

## Gold (I) Cyanide

### 3. Hazards Identification

#### Primary Routes(s) Of Entry

Eyes	Likely
Skin	Likely
Inhalation	Likely
Ingestion	Likely

#### Eye Hazards

Causes eye irritation.

#### Skin Hazards

Highly toxic. May be fatal if absorbed through skin.

#### Ingestion Hazards

Highly toxic. May be fatal if swallowed.

#### Inhalation Hazards

Highly toxic. May be fatal if inhaled in large quantities.

#### Chronic/Carcinogenicity Effects

None

#### Conditions Aggravated By Overexposure

To the best of our knowledge, the chemical, the physical, and toxicological properties have not been thoroughly investigated.

#### First Aid (Pictograms)



### 4. First Aid Measures

#### Eye

Flush for 15 minutes with plenty of water. If discomfort occurs or persists, contact a physician.

#### Skin

Flush area for 15 minutes with water and wash with soap and water. If discomfort occurs or persists, contact a physician. Remove contaminated clothing and shoes and wash before reuse.

#### Ingestion

If swallowed, do not induce vomiting unless directed... Call a physician or a poison control center immediately.

#### Inhalation

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

#### Fire Fighting (pictograms)



# MATERIAL SAFETY DATA SHEET

## Gold (I) Cyanide

### 5. Fire Fighting Measures

**Flash Point Method:** NA

**Flammability Class:** NA

#### **Fire And Explosion Hazards**

Use proper safety equipment. Can decompose to emit toxic fumes.

#### **Extinguishing Media**

Use CO2 (Carbon Dioxide), dry chemical, or foam.

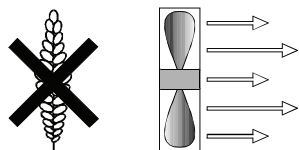
#### **Fire Fighting Instructions**

Use NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

### 6. Accidental Release Measures

Evacuate area. Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves. Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

### Handling & Storage (Pictograms)



### 7. Handling and Storage

#### **Handling And Storage Precautions**

Avoid contact with eyes, prolonged or repeated contact with skin. Avoid breathing dust. Use compatible chemical-resistant gloves. Wash hands thoroughly after handling.

#### **Handling Precautions**

User Exposure: Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

#### **Storage Precautions**

Suitable: Keep tightly closed. Store in a cool dry place. Handle and store under nitrogen.

#### **Work/Hygienic Practices**

Wash thoroughly with soap and water after handling. Use good personal hygiene.

### Protective Clothing (Pictograms)



### 8. Exposure Controls/Personal Protection

#### **Engineering Controls**

Ventilation: Local Exhaust: Required in handling area  
Mechanical: Desirable to insure concentration of material below TLV/TWA levels  
Other: Closed Ventilation system (Laboratory Fume Hood)

# MATERIAL SAFETY DATA SHEET

## Gold (I) Cyanide

### 8. Exposure Controls/Personal Protection (cont)

#### Eye/Face Protection

ANSI approved safety glasses/goggles

#### Skin Protection

Rubber/Neoprene (use compatible chemical-resistant gloves).

#### Respiratory Protection

Government approved respirator.

#### Other/General Protection

Lab coat/apron, flame and chemical resistant protective clothing, eye wash, safety shower, and hygiene facilities for washing.

### 9. Physical And Chemical Properties

#### Appearance

Deep yellow powder

**Chemical Type:** Mixture

**Physical State:** Solid

**Melting Point:** NA °C

**Boiling Point:** NA °C

**Specific Gravity:** 7.14 g/cm<sup>3</sup>

**Molecular Weight:** 222.99

**Vapor Pressure:** NA

**Vapor Density:** NA

**pH Factor:** NA

**Solubility:** NA

**Evaporation Rate:** NA

### 10. Stability And Reactivity

**Stability:** Moisture sensitive

**Hazardous Polymerization:** Will not occur

#### Conditions To Avoid (Stability)

Protect from moisture.

#### Incompatible Materials

Strong acids and strong oxidizing agents.

#### Hazardous Decomposition Products

Nitrogen oxides, Hydrogen cyanide Carbon monoxide, Carbon dioxide.

#### Conditions To Avoid (Polymerization)

Will not polymerize.

### 11. Toxicological Information

#### Miscellaneous Toxicological Information

Multiple Routes: May be fatal if inhaled, swallowed, or absorbed through skin. May cause irritation.

SIGNS AND SYMPTOMS OF EXPOSURE:

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

# MATERIAL SAFETY DATA SHEET

## Gold (I) Cyanide

<b>12. Ecological Information</b>
No Data Available...
<b>13. Disposal Considerations</b>
Consult Federal EPA, State and local regulations for proper disposal/recycle/reclamation NOTE: Chemical additions, processing, or otherwise altering this material may make the waste management information presented above incomplete, inaccurate, or otherwise inappropriate.
<b>14. Transport Information</b>
<b><u>Proper Shipping Name</u></b> Cyanides, inorganic, solid, n.o.s.
<b><u>Hazard Class</u></b> 6.1
<b><u>Secondary Hazard Class</u></b> NA
<b><u>DOT Identification Number</u></b> 1588
<b><u>DOT Shipping Label</u></b> NA
<b><u>Freight Class</u></b> NA
<b><u>Packaging Exceptions</u></b> NA
<b><u>Packaging Requirements</u></b> PG-II
<b><u>Additional Shipping Paper Description</u></b> IATA: Same as DOT 49 CFR. Consult IATA regulation before shipping.
<b><u>DOT (Pictograms)</u></b>
A diamond-shaped pictogram with a skull and crossbones in the center, the word "POISON" below it, and the number "6" at the bottom.
<b><u>TDG - Canada (Pictograms)</u></b>
A diamond-shaped pictogram with a skull and crossbones in the center, the word "POISON" below it, and the number "6" at the bottom.
<b>15. Regulatory Information</b>
<b><u>U.S. Regulatory Information</u></b> TSCA: This product is TSCA listed.

# MATERIAL SAFETY DATA SHEET

## Gold (I) Cyanide

### 15. Regulatory Information (cont)

#### SARA Section 313 Notification

This product does not require 313 reporting.

#### Canadian Regulatory Information

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

#### European Union (EU) Regulatory Information

Symbol of Danger: T+-N

Indication of Danger: Very toxic. Dangerous for the environment.

R: 26/27/28-32-50/53

Risk Statements: Very toxic by inhalation, in contact with skin and if swallowed. Contact with acids liberates very toxic gas. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S: 7-28-29-45-60-61

Safety Statements: Keep container tightly closed. After contact with skin, wash immediately with plenty of water. Do not empty into drains. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/safety data sheets.

#### Other International Regulations

US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Highly Toxic (USA) Toxic (EU).

Risk Statements: Toxic by inhalation, in contact with skin and if swallowed.

Safety Statements: Do not breathe dust. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

### WHMIS - Canada (Pictograms)



### DSCL - Europe (Pictograms)



### 16. Other Information

#### NFPA Rating

Health: 1

Fire: 0

Reactivity: 0

Other: TOX

# MATERIAL SAFETY DATA SHEET

## Gold (I) Cyanide

### 16. Other Information (cont)

#### **HMIS Rating**

Health: 1

Fire: 0

Reactivity: 0

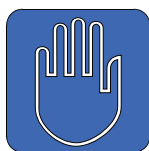
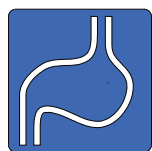
Personal Protection: J

#### **Revision/Preparer Information**

**MSDS Preparer: DF Goldsmith Chemical and Metal**

**MSDS Preparer Phone Number: 847-869-7800**

#### **Other (Pictograms)**



#### **Disclaimer**

In compliance with the OSHA Hazard Communication Standard, 29 C.F.R 1910.1200, we are providing you with a Materials Safety Data Sheet (MSDS) for the hazardous material you are purchasing.

It is your responsibility to educate your employees on the safe use of the hazardous material. With this in mind, a copy should be forwarded to the supervisor of the user or to the user themselves, and copy should be retained in your files for future reference.

DF Goldsmith Chemical and Metal makes no presentation as to the accuracy of the information in the MSDS. The information is believed to be correct; however, you (the customer), should perform your own investigation and independent verification. If you resell the product, you are responsible to forward the information in the MSDS to your customer.