



MATERIAL SAFETY DATA SHEET
COMPLIES WITH 29 CFR 1910.1200.
OSHA HAZARD COMMUNICATION RULE

DATE OF LAST REVISION: 03-02

CHEMICAL IDENTITY

LABEL IDENTITY	GOLD
CHEMICAL NAME/SYNONYMS	GOLD
FORMULA	Au
CHEMICAL FAMILY	METAL
CAS REGISTRY NUMBER	7440-57-5
HAZARDOUS INGREDIENTS	NOT ESTABLISHED

PHYSICAL AND CHEMICAL PROPERTIES

COLOR, FORM AND ODOR	Soft yellow metal, odorless
BOILING POINT	2807
DENSITY (gm/cc)	17.0 @ 1063°
VAPOR PRESSURE	1 mm @ 1869°
% VOLATILE BY WEIGHT	Essentially zero
REACTION WITH WATER	NA
EVAPORATION RATE (H2O=1)	NA
SOLUBILITY IN WATER	Insoluble
MELTING POINT	1064

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	Non-flammable as a solid
AUTOIGNITION TEMPERATURE (°C)	NA
FLAMMABILITY	Non-flammable
EXTINGUISHING MEDIA	This material is non-combustible. Use appropriate extinguishing agent for surrounding fires. Do not use water to extinguish fires around operations involving molten metal, due to the potential for steam explosion.
SPECIAL FIRE FIGHTING PROCEDURES	Self contained breathing apparatus should be worn when fighting metal dust fires. High levels of dust or fine particles in the air may ignite or explode.
UNUSUAL FIRE & EXPLOSION HAZARDS	None known



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HEALTH HAZARD INFORMATION

TOXICITY DATA **NA**

HMIS RATING:

HEALTH: **na** FLAMMABILITY: **na** REACTIVITY: **na** PERSONAL PROTECTION: **na**

ROUTES OF ENTRY

INHALATION: **Yes**
SKIN: **Yes**
INGESTION: **ND**

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:

Individuals who may have had allergic reactions to metals or sensitivity, may encounter rash or dermatitis, if skin contact with this product occurs. Persons with impaired pulmonary functions, may incur further impairment if dust or fumes are inhaled.

EFFECTS OF OVEREXPOSURE (acute and chronic):

INHALATION: **Dust could be irritating to respiratory trace.**

DERMAL: **May cause contact dermatitis.**

OTHER: **There is no toxicological data available for gold, but toxicity is thought to be very low.**

CARCINOGENICITY: **No** NTP: **No** IARC MONOGRAPHS: **No** OSHA REGULATE: **No**

EMERGENCY FIRST AID PROCEDURES:

INGESTION

INHALATION

Obtain medical attention at once.

Breathing difficulty, caused by inhalation of dust or fumes requires removal to fresh air. If breathing has stopped perform artificial respiration and seek medical attention at once.

SKIN CONTACT

Skin cuts and abrasions can be treated by standard first aid. Skin contamination with dust or powder can be removed with soap and water. If irritation persists obtain medical assistance.



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EYE CONTACT

Dust or powder should be flushed from the eyes with running water for 15 minutes. If irritation persists obtain medical assistance.

REACTIVITY DATA

STABILITY	Stable
CONDITIONS CONTRIBUTING TO UNSTABILITY	None known
INCOMPATIBILITY (MATERIALS TO AVOID)	Acetylene, Ammonia and Strong oxidizers
HAZARDOUS DECOMPOSITION PRODUCTS	None under proper usage conditions
HAZARDOUS POLYMERIZATION CONDITIONS TO AVOID	Will Not Occur Conditions which create dust or fumes

SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

In solid form this material poses no special clean up problems. Use normal clean-up procedures; wet sweeping or HEPA vacuum, for clean-up of dust or powder. Do not use compressed air for cleaning.

WASTE DISPOSAL METHOD:

Because of its high intrinsic value this material should be reclaimed. Dispose of in accordance with all applicable Federal, State and Local Regulations

SPECIAL PROTECTIVE INFORMATION

RESPIRATORY PROTECTION	Use an appropriate NIOSH approved respirator if airborne dust concentration exceed the PEL or TLV.
LOCAL EXHAUST	Recommended, when cutting, grinding or melting or any other operation where dust or fumes are created.
SKIN PROTECTION	Recommended to prevent mechanical irritation.
EYE PROTECTION	Safety glasses are recommended.
OTHER PROTECTIVE EQUIPMENT	Eye wash fountain should be readily available in areas of use or handling.



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GENERAL: **Recommended.**
EXPOSURE LIMITS: **Not established for product as whole.**

SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE:

**In solid form this material poses no special problems. Store metal in a dry area.
Do not store adjacent to acids**

TRANSPORTATION REQUIREMENTS DOT CLASS: **None**
UN NUMBER: **None**
PRODUCT RQ: **None**
DOT SHIPPING NAME: **Not Regulated**
TECHNICAL SHIPPING NAME: **Metal Alloy**

PRECAUTIONARY LABELING **NONE**

THE ABOVE INFORMATION IS ACCURATE TO THE BEST OF OUR KNOWLEDGE. HOWEVER, SINCE DATA, SAFETY STANDARDS AND GOVERNMENT REGULATIONS ARE SUBJECT TO CHANGE THE CONDITIONS OF HANDLING AND USE, OR MISUSE ARE BEYOND OUR CONTROL, **ANGSTROM SCIENCES** MAKE NO WARRANTY, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FOR THE RELIANCE THEREON. USER SHOULD SATISFY HIMSELF THAT HE HAS ALL CURRENT DATA RELEVANT TO HIS PARTICULAR USE.

NA= NOT APPLICABLE

ND= NO DATA FOUND