



Safety Data Sheet

Product No. 21-10, 21-100, 21-2, 21-50, 8071, 91110, 91520, 91521, 9550, 9552, 9562, Gold Products

Issue Date (04-21-15)

Review Date (3-18-16)

Section 1: Product and Company Identification

Product Name: Gold Products

Synonym: Gold metal; burnish gold; colloidal gold; gold flake; gold leaf; gold powder; magnesium gold purple; shell gold.

Company Name

Ted Pella, Inc., P.O. Box 492477, Redding, CA 96049-2477

Domestic Phone (800) 237-3526 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)

International Phone (01) (530) 243-2200 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)

Chemtrec Emergency Number 1-800-424-9300 24 hrs a day.

Section 2: Hazard Identification

2.1 Classification of substance or mixture

The substance is not classified as hazardous to health or the environment according to CLP regulation. Classification according to Directive 67 /548/EEC or Directive 1999/45/EC: Not Applicable.

Information concerning particular hazards for human and environment: Not Applicable; No information known.

GHS Pictograms: NA

GHS Categories: NA

2.2 Label elements

Hazard Pictograms: NA

Signal Word: NA

Hazard Statements: NA

Precautionary Statements: NA

2.3 Other hazards

Hazards not otherwise classified: No information known.

Health Effects:

HMIS® Hazard Rating: Health: 0; Fire: 0; Reactivity: 0
(0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

Results of PBT and vPvB assessment:

PBT: NA

vPvB: NA

Emergency overview

Appearance: Yellow, solid, pieces, powder, wire or flat disc.

Immediate effects: Poison by intravenous route. Questionable carcinogen.

Potential health effects

HEALTH HAZARDS (ACUTE AND CHRONIC): Gold poisoning is rare. The few recorded cases of fatalities are the result of therapeutic overdose. Human systemic effects are similar to those of arsenic exposure and include: violent diarrhea, gastritis, colitis, dermatitis, blood dyscrasias, leukopenia, aganulocytosis and aplastic anemia. The therapeutic use of gold compounds has been associated with serious effects at the kidney, liver, and other vital organs. Generally, gold compounds are poorly absorbed when ingested. (Sax, Dangerous Properties of Industrial Materials, eighth edition)

Primary Routes of entry: None

Signs and Symptoms of Overexposure: ND

Eyes: May cause eye irritation.

Skin: May cause skin irritation.

Ingestion: May cause irritation of the digestive tract. May be harmful if swallowed.

Inhalation: May cause respiratory tract irritation. May be harmful if inhaled.

Chronic Exposure: ND

Chemical Listed As Carcinogen or Potential Carcinogen: None

See Toxicological Information (Section 11)

Potential environmental effects

See Ecological Information (Section 12)

Section 3: Composition / Information on Ingredients

Principle Hazardous Component(s) (chemical and common name(s)) (Cas. No)	%	OSHA PEL mg/m ³	ACGIH TLV mg/m ³	NTP Carcinogen	IARC Carcinogen	OSHA regulated Carcinogen
Gold (7440-57-5) EC-No. 231-165-9	≤100	NE	NE	No	No	No

Section 4: First Aid Measures**If accidental overexposure is suspected**

Eye(s) Contact: Flush eyes with lukewarm water, lifting upper and lower eyelids, for at least 15 minutes. Seek medical attention if symptoms persist.

Skin Contact: Remove contaminated clothing; brush material off skin; wash affected area with mild soap and water; seek medical attention if symptoms persist.

Inhalation: Remove victim to fresh air; keep warm and quiet; give oxygen if breathing is difficult and seek medical attention if symptoms persist.

Ingestion: Give 1-2 glasses of milk or water and induce vomiting; seek medical attention if symptoms persist. Never induce vomiting or give anything by mouth to an unconscious person.

Note to physician

Treatment: ND

Medical Conditions generally Aggravated by Exposure: ND

Section 5: Fire Fighting Measures

Flash Point: NA

Flammable Limits: NA

Auto-ignition point: NA

Fire Extinguishing Media: Use carbon dioxide, extinguishing powder, or foam. Water may be ineffective but may be used for cooling exposed containers.

Special Fire Fighting Procedures: Firefighters must wear full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution. Extremely inactive; not attacked by acids, air or oxygen. Superficially attacked by aqueous halogen at room temperature. React with aqua regia, with mixtures containing chlorides, bromides, or iodides if they can generate nascent halogens. Reacts with many oxidizing mixtures especially those containing halogens. Reacts with alkali cyanides, solutions of thiocyanates and double cyanides. Does not corrode in air but is tarnished by sulfur. Finely divided gold with hydrogen peroxide may explode.

Unusual Fire and Explosion Hazards: Finely divided gold with hydrogen peroxide may explode.

Hazardous combustion products: If the product is involved in a fire, metal oxide fumes can be released.

DOT Class: None

Section 6: Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled:

Personal precautions, protective equipment, and emergency procedures: Wear appropriate respiratory and protective equipment specified in section VIII-control measures.

Clean-up methods: Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for proper disposal or recycle. Take care not to raise dust.

Environmental precautions: Do not allow material to be released to the environment without government permits. Do not allow material to reach sewage system or any water course. Do not allow to penetrate ground/soil.

Waste Disposal Methods: Dispose of waste according to federal, state and local regulations.

Section 7: Handling and Storage

Precautions to be Taken in Handling and Storage: Store in a cool, dry place and keep container tightly sealed.

Storage temperature: Room temperature.

Storage Pressure: NA

Section 8: Exposure Controls / Personal Protection

Engineering Controls

Implement engineering and work practice controls to reduce and maintain concentration of exposure at low levels.

Ventilation required: Good general ventilation should be sufficient to control airborne levels.

Personal Protection Equipment

General: Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating or smoking. Do not blow dust off clothing or skin with compressed air.

Respiratory protection: NIOSH approved respirator for dust conditions

Protective gloves: Rubber gloves

Skin protection: Protective work clothing

Eye protection: Safety glasses

Additional clothing and/or equipment: None

Exposure Guidelines

See Composition/Information on Ingredients (Section 3)

Section 9 Physical and Chemical Properties

Appearance and Physical State: Gold solid in various forms

Odor (threshold): None (NA)

Specific Gravity (H₂O=1): 19.32 g/cm³

Vapor Pressure (mm Hg): NA

Vapor Density (air=1): NA

Percent Volatile by volume: NA

Evaporation Rate (butyl acetate=1): NA

Boiling Point: 2808 °C

Melting point: 1064 °C

pH: NA

Solubility in Water: Insoluble

Molecular Weight: ND

Section 10: Stability and Reactivity

Stability: Stable.

Conditions to Avoid: Incompatible materials.

Materials to Avoid (Incompatibility): Attacked by aqueous halogens at room temperature.

Incompatible with sulfuric acid, ammonia, aqua regia; with mixtures containing chlorides, bromides, or iodides if they can generate nascent halogens; with many oxidizing mixtures especially those containing halogens; alkali cyanides, solutions of thiocyanates, and double cyanides; acetylene, CS₂, ethanol + nitric acid, bromoazide, ethyleneimine, oxalic acid, permonosulfuric acid, tartaric acid, NH₄NO₃, inorganic and

organic peroxides, metal chlorates, bromates, and iodates; SE, TE, S, MnCl₂, azides, hydroxylamine, and CrO₃, K₂O₃.

Hazardous Decomposition Products: Metal oxide fumes, nascent halogens.

Hazardous Polymerization: Will not occur.

Section 11: Toxicological Information

Results of component toxicity test performed:

Implant-Rat:	TDLo 200 mg/Kg	Equivocal tumorigenic agent.
Implant-Mouse:	TDLo 21 g/Kg	Equivocal tumorigenic agent.
Implant-Rat:	TD 4730 mg/Kg	Equivocal tumorigenic agent.
Intravenous-Rat:	TDLo 58 mg/Kg	
Ipr-Rat:	TDLo: 250 mg/Kg	
Scu-Rat:	TDLo: 250 mg/Kg	

Human experience: Powders may cause localized skin irritation or irritate the respiratory tract by mechanical action.

This product **does not** contain any compounds listed by NTP or IARC or regulated by OSHA as a carcinogen.

Section 12: Ecological Information

Ecological Information: ND

Chemical Fate Information: ND

Section 13 Disposal Considerations

RCRA 40 CFR 261 Classification: ND.

Recycle.

Federal, State and local laws governing disposal of materials can differ. Ensure proper disposal compliance with proper authorities before disposal.

Section 14: Transportation Information

US DOT Information: Proper shipping name: Not regulated

IATA: Proper shipping name: Not regulated

IMO: Proper shipping name: Not regulated

Marine Pollutant: No

Canadian TDG: Not regulated

Section 15: Regulatory Information

United States Federal Regulations

SDS complies with OSHA's Hazard Communication Rule 29, CFR 1910.1200.

SARA: No components subject to reporting.

SARA Title III: No components subject to reporting.

RCRA: ND

TSCA: Listed 8(b) gold powder

CERCLA: Not listed

State Regulations

California Proposition 65: Not listed.

International Regulations

Canada WHMIS: Not regulated
Europe EINECS Numbers: ND

Section 16: Other Information

Label Information: ND
European Risk and Safety Phrases: ND
European symbols needed: ND
Canadian WHMIS Symbols: ND

Abbreviations used in this document

NE= Not established
NA= Not applicable
NIF= No Information Found
ND= No Data

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