



Material Safety Data Sheet

Product No. 15701-1 through 15714-20 Colloidal Gold, 2, 5, 10, 15, 20, 30, 40, 50, 60, 80, 100, 150, 200, and 250nm

Issue Date (02-11-05)

Review Date (04-12-12)

Section 1: Product and Company Identification

Product Name: Colloidal Gold

Synonym: Burnish gold, C.I. 77480, C.I. Pigment metal 3, Colloidal gold, Gold flake, Gold powder, Magnesium gold purple, Shell gold. The synonyms supplied are for a closely related compound. Non biological in nature.

Manufacture: BB International Ltd

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: Composition / Information on Ingredients

Principle Hazardous Component(s) (chemical and common name(s)) (Cas. No)	%	OSHA PEL mg/m3	ACGIH TLV mg/m3	NTP	IARC	OSHA regulated
Colloidal gold (7440-57-5)	0.001-0.01	No	No	No	No	No

Section 3: Hazard Identification

Emergency overview

Appearance: Liquid, colorless, pale yellow, red or purple.

Immediate effects: Avoid contact and inhalation.

Potential health effects

Primary Routes of entry: NIF

Signs and Symptoms of Overexposure: Exposure to gold compounds can cause contact dermatitis. The toxicological properties have not been thoroughly investigated. The data supplied are for a closely related compound.

Eyes: May cause irritation.

Skin: May be harmful by skin absorption.

Ingestion: May be harmful by ingestion

Inhalation: May be harmful by inhalation.

Chronic Exposure: ND

Chemical Listed As Carcinogen Or Potential Carcinogen: No

See Toxicological Information (Section 11)

Potential environmental effects

See Ecological Information (Section 12)

Section 4: First Aid Measures

If accidental overexposure is suspected

Eye(s) Contact: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers.

Skin Contact: In case of skin contact, flush with copious amounts of water for at least 15 minutes.

Inhalation: If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

Ingestion: If swallowed, wash out mouth with water provided that person is conscious.

Call a physician.

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: Water spray. Carbon dioxide, dry chemical powder or appropriate foam.

Special Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes

Unusual Fire and Explosion Hazards: Emits toxic fumes under fire conditions.

Hazardous combustion products: ND

DOT Class: None

Section 6: Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled: Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Absorb on sand or vermiculite and place in closed containers for disposal. Ventilated area and wash spill site after material pickup is complete.

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: See section 8

Storage temperature: **Do not freeze.**

Storage Pressure: NA

Section 8: Exposure Controls / Personal Protection

Engineering Controls

Ventilation required: Mechanical exhaust.

Personal Protection Equipment

Respiratory protection: Wear appropriate NIOSH/MSHA approved respirator.

Protective gloves: Chemical resistant gloves.

Skin protection: Wear protective clothing.

Eye protection: Wear safety goggles or face shield

Additional clothing and/or equipment: ND

Exposure Guidelines

See Composition/Information on Ingredients (Section2)

Section 9 Physical and Chemical Properties

Appearance and Physical State: Liquid, colorless, pale yellow, red or purple

Odor (threshold): None

Specific Gravity (H₂O=1): ND

Vapor Pressure (mm Hg): ND

Vapor Density (air=1): ND

Percent Volatile by volume: ND

Evaporation Rate (butyl acetate=1): As water.

Boiling Point: As water.

Freezing point / melting point: As water

pH: 5 to 10

Solubility in Water: Aqueous solution

Molecular Weight: NA

Section 10: Stability and Reactivity

Stability: Stable

Conditions to Avoid: Freezing

Materials to Avoid (Incompatibility): Contact with salt will cause precipitation of colloid.

Hazardous Decomposition Products: Carbon dioxide and carbon monoxide.

Hazardous Polymerization: Will not occur

Section 11: Toxicological Information

Results of component toxicity test performed: RTECS data supplied are for a closely related compound. RTECS number: MD5070000, Gold

Target Organ Data:

Lungs, thorax or respiration (acute pulmonary oedema)

Lungs, thorax or respiration (Dyspnea)

Tumorigenic (equivocal tumorigenic agent by RTECS criteria)

Tumorigenic (tumors at site of application)

Only selected registry of toxic effects of chemical substances is presented here.

See actual entry in RTECS for complete information.

Human experience: ND

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: NIF. Contact a licensed waste disposal service to dispose of this material. Licensed Waste Disposal: Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

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

Hazard Class: None

Packaging group: None

UN Number: None

Limitations: None

IATA: Proper shipping name: Not regulated

Hazard Class: None

Packing group: None

UN Number: None

Limitations: None

Domestic shipments only: NA

IMO: Proper shipping name: Not regulated

Class: None

UN Number: None

Packing group: None

EMS: ND

MFAG: ND

Marine Pollutant: No

Canadian TDG: ND

IMDG Page: ND

Limitations: ND

Section 15: Regulatory Information

United States Federal Regulations

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

SARA Title III: None

RCRA: None

TSCA: EPA TSCA section 8 (B) Chemical Inventory

EPA TSCA section 8 (D) Unpublished health / safety studies

EPA TSCA test submission (TSCATS) data base, September 1997.

CERCLA: No RQ

State Regulations

California Proposition 65: None

International Regulations

Canada WHMIS: ND

Europe EINECS Numbers: EC NO: 231-165-9

TLV and source

RTECS data and synonyms supplied are for a closely related compound.

Reviews, standards and regulations

OEL = MAK

NOHS 1974: HZD T0367; NIS 2; TNF 80; NOS 2; TNE 174

NOHS 1974: HZD 35455; NIS 18; TNF 1230; NOS 25; TNE 9464

NOES 1983: HZD X2971; NIS 1; TNF 3; NOS1; TNE 6

NOES 1983: HZD X7506; NIS 4; TNF 225; NOS 10; TNE 2626; TFE 108

NOES 1983: HZD 35455; NIS 27; TNF 2595; NOS39; TNE 30128; TFE 5425

Section 16: Other Information

Label Information: Avoid contact and inhalation.

European Risk and Safety Phrases: NIF

European symbols needed: NIF

Canadian WHMIS Symbols: NIF

HMIS® Hazard Rating: Health: **1**; Fire: **0**; Physical Hazard: **0**; Personal Protection: See Section 8

(0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

Abbreviations used in this document

NE= Not established

NA= Not applicable

NIF= No Information Found

ND= No Data

Disclaimer

Ted Pella, Inc. makes no warranty of any kind regarding the information furnished herein. Users should independently determine the suitability and completeness of information from all sources. While this data is presented in good faith and believed to be accurate, it should be considered only as a supplement to other information gathered by the user. It is the User's responsibility to assure the proper use and disposal of these materials as well as the safety and health of all personnel who may work with or otherwise come in contact with these materials.