

Material Safety Data Sheet

Product No. 15705-1SC, 15705-20SC, 15705-5SC, 15707-1CS, 15707-20SC, 15707-5SC, 15708-6SSC, 15708-6SC, 15708-8SSC, 15708-8SC, 15709-20SC, 15710-20SC

Silver Colloids 20, 40, 60, 80, nm

Issue Date (06-21-07) Review Date (04-12-12)

Section 1: Product and Company Identification Product Name: Silver Colloids 20, 40, 60, 80, nm

Synonym: None

Manufacture/Vendor: BBinternational, Cardiff, CF14 5DX, UK

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
*Silver nitrate (7761-88-8)	< 0.001	0.01	0.01	No	No	No
*Sodium citrate dihydrate (6132-04-3)	ND	ND	ND	No	No	No

Silver(I) nitrate (1:1): RTECS #: VW4725000 Citric acid, trisodium salt RTECS #: GE8300000

Section 3: Hazard Identification

Emergency overview

Appearance: Clear yellow liquid (varies with size)

Immediate effects: ND **Potential health effects**

Primary Routes of entry: Ingestion, inhalation, skin and eye contact.

Signs and Symptoms of Overexposure: ND

Eyes: May cause irritation. Skin: May cause irritation.

Ingestion: ND Inhalation: ND

Chronic Exposure: ND

Chemical Listed As Carcinogen Or Potential Carcinogen: None

See Toxicological Information (Section11)

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. Call a physician.

Skin Contact: In case of skin contact, flush with copious amounts of water.

Inhalation: If inhaled, remove to fresh air. If breathing becomes difficult, call a physician. Ingestion: If swallowed, wash out mouth with water provided 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: None

Flammable Limits: None Auto-ignition point: None Fire Extinguishing Media: NA

Special Fire Fighting Procedures: NA Unusual Fire and Explosion Hazards: None

Hazardous combustion products: ND

DOT Class: Not regulated.

Section 6: Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled: Use absorbent material and collect into container for disposal.

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: Do not freeze.

Storage temperature: Room temperature.

Storage Pressure: NA

Section 8: Exposure Controls / Personal Protection

Engineering Controls

Ventilation required: Not required under normal use

Personal Protection Equipment

Respiratory protection: Not required under normal use.

Protective gloves: gloves Skin protection: Clothing

Eye protection: Safety glasses

Additional clothing and/or equipment: ND

Exposure Guidelines

See Composition/Information on Ingredients (Section2)

Section 9 Physical and Chemical Properties

Appearance and Physical State: Clear yellow liquid (varies with size)

Odor (threshold): ND

Specific Gravity (H₂O=1): ~1 Vapor Pressure (mm Hg): ND Vapor Density (air=1): ND Percent Volatile by volume: ND

Evaporation Rate (butyl acetate=1): ND

Boiling Point: ND

Freezing point / melting point: ND

pH: ND

Solubility in Water: Soluble Molecular Weight: NA

Section 10: Stability and Reactivity

Stability: Stable

Conditions to Avoid: Freezing

Materials to Avoid (Incompatibility): ND Hazardous Decomposition Products: ND Hazardous Polymerization: Will not occur

Section 11: Toxicological Information

Results of component toxicity test performed: ND

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: ND

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.

<u>IATA</u>: Proper shipping name: Not regulated. <u>IMO</u>: Proper shipping name: Not regulated.

Marine Pollutant: No

Canadian TDG: Not regulated.

Section 15: Regulatory Information

United States Federal Regulations

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

SARA: ND

SARA Title III: None

RCRA: None

TSCA: Components listed in Inventory

CERCLA: < 0.001% Silver nitrate (7761-88-8) RQ = 1 lbs (0.454 Kg)

State Regulations

California Proposition 65: No International Regulations

Canada WHMIS: ND

Europe EINECS Numbers: ND

Section 16: Other Information

Label Information: ND

European Risk and Safety Phrases: ND

European symbols needed: ND Canadian WHMIS Symbols:

Hazard Rating: Health: 1; Fire: 0; Reactivity: 1

Estimated Hazard Rating.

(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.

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