



Material Safety Data Sheet

Product No. 16031, 16034 Pelco® Colloidal Silver

Issue Date (04-01-09)

Review Date (04-12-12)

Section 1: Product and Company Identification

Product Name: Pelco® Colloidal Silver

Synonym: Pelco® Conductive Liquid Silver, Pelco® Colloidal Silver Paint

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/m ³	ACGIH TWA mg/m ³	NTP	IARC	OSHA regulated
Silver (7440-22-4)*	~60	0.01	ND	No	No	No
Arcosolve PM (107-98-2)	**	100 PPM	ND	No	No	No
Toluene (108-88-3)	**	200 PPM	20 PPM	No	3	No
Ethanol (64-17-5)	**	1000 PPM	ND	No	No	No
Ethyl Acetate (141-78-6)	**	400 PPM	ND	No	No	No

*NIOSH IDLH: 10 mg/m³ (as Ag) 0.1 mg/m³

** Proprietary

Section 3: Hazard Identification

Emergency overview

Appearance: Gray liquid or paste

Immediate effects: Flammable material. Caution! May cause skin irritation.

Potential health effects

Primary Routes of entry: Inhalation, ingestion, skin, and eye contact.

Signs and Symptoms of Overexposure: ND

Eyes: May cause eye irritation.

Skin: May cause skin irritation.

Ingestion: NIF

Inhalation: NIF

Chronic Exposure: NIF

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: Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get medical attention if irritation persists.

Skin Contact: Wash area thoroughly with soap and water. Get medical aid if irritation develops or persists.

Inhalation: Remove from exposure to fresh air immediately. Get medical aid if cough or other symptoms appear.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. If victim is conscious and alert, give 2-4 cups full of milk or water. Get medical aid.

Note to physician

Treatment: ND

Medical Conditions generally Aggravated by Exposure: ND

Section 5: Fire Fighting Measures

Flash Point: ND on solvent mixture. Ethyl Acetate: 24 °F (-4.4 °C)

Flammable Limits: ND

Auto-ignition point: ND

Fire Extinguishing Media: Carbon dioxide, foam, dry chemical, water

Special Fire Fighting Procedures: As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

Unusual Fire and Explosion Hazards: Can burn in fire, releasing toxic vapors. Vaporized easily at normal temperatures.

Hazardous combustion products: Forms carbon dioxide and carbon monoxide.

DOT Class: Flammable

Section 6: Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled: Wear protective equipment.

For an uncontrolled release of this product to the environment, take immediate steps to stop and contain release. Notify local authorities, if required. Clean up with rags or paper and place in container for refining.

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: Used with adequate ventilation. Avoid contact with skin and eyes. Wash thoroughly after handling. Keep container closed when not in use.

Storage temperature: Store at ambient or lower temperature.

Storage Pressure: NA

Section 8: Exposure Controls / Personal Protection

Engineering Controls

Ventilation required: Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Personal Protection Equipment

Respiratory protection: Good general ventilation should be sufficient to control airborne levels. A NIOSH approved dust/mist respirator is recommended when TLV levels are exceeded.

Protective gloves: Use appropriate chemical gloves when handling.

Skin protection: Use appropriate protective clothing, gloves and shoes.

Eye protection: Wear chemical safety glasses with side shields or face shield

Additional clothing and/or equipment: Eye wash facilities available where eye contact can occur.

Exposure Guidelines

See Composition/Information on Ingredients (Section2)

Section 9 Physical and Chemical Properties

Appearance and Physical State: Grey paste liquid.

Odor (threshold): Strong odor

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): ND

Boiling Point: 167° F

Freezing point / melting point: ND

pH: NA

Solubility in Water: ND

Molecular Weight: NA

Section 10: Stability and Reactivity

Stability: Stable under normal conditions of use. Keep cap tight.

Conditions to Avoid. Incompatible materials

Materials to Avoid (Incompatibility): Strong oxidizers, acids and alkali.

Hazardous Decomposition Products: Carbon dioxide and carbon monoxide

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: Ecological data are not available. Material should be treated as harmful to aquatic organisms.

Chemical Fate Information: ND

Section 13 Disposal Considerations

RCRA 40 CFR 261 Classification: Can be recycled to recover precious metal.

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: Flammable liquid, n.o.s. (1-Methoxy-2-Propanol, Toluene)

Hazard Class: 3

Packaging group: III

UN Number: UN1993

IATA: Proper shipping name: Flammable liquid, n.o.s. (1-Methoxy-2-Propanol, Toluene)

Hazard Class: 3

Packing group: III

UN Number: UN1993

IMO: Proper shipping name: Flammable liquid, n.o.s. (1-Methoxy-2-Propanol, Toluene)
Class: 3

UN Number: UN1993

Packing group: III

Marine Pollutant: No

Canadian TDG: Flammable liquid, n.o.s. (1-Methoxy-2-Propanol, Toluene)

Section 15: Regulatory Information

United States Federal Regulations

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

SARA: Section 302: No. Section 311: No.

SARA Title III: Following ingredients of this product are listed in SARA 313: Toluene:

CAS# 108-88-3, 10% Maximum. Ethyl Acetate: CAS# 141-78-6, 4% Maximum.

Silver: CAS# 7440-22-4, 60% Maximum.

RCRA: ND

TSCA: All components of this product are listed on the TSCA Inventory.

CERCLA: Toluene: RQ = 1000 lbs (45.4 Kg), Silver: RQ = 1000 lbs (45.4 Kg), Ethyl Acetate: RQ = 5000 lbs (2270 Kg)

State Regulations

California Proposition 65: Contains Toluene and Ethanol. These chemicals are known to the State of California to cause birth defects or other reproductive harm.

International Regulations

Canada WHMIS: ND

Europe EINECS Numbers: ND

Section 16: Other Information

Label Information: Flammable. Caution may cause skin irritation.

European Risk and Safety Phrases: ND

European symbols needed: ND

Canadian WHMIS Symbols: ND

Hazard Rating HMIS®: Health: **1**; Fire: **3**; Physical hazard: **0**

NFPA Ratings: Health: **1**; Fire: **3**; Instability: **0**

(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.