

Safety Data Sheet

Product No. 16047 PELCO® High Performance Silver Paste, 50g

Issue Date (06-01-15)

Review Date (08-31-17)

Section 1: Product and Company Identification

Product Name: PELCO® High Performance Silver Paste, 50g

Synonym:

Company Name

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

Inside USA and Canada 1-800-237-3526 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)

Outside USA and Canada 1-530-243-2200 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)

CHEMTREC USA and Canada Emergency Contact Number 1-800-424-9300 24 hours a day

CHEMTREC Outside USA and Canada Emergency Contact Number +1-703-741-5970 24 hours a day

Section 2: Hazard Identification

GHS Pictograms



Irritant

GHS Categories

GHS07: Irritant

Eye Irritation Category 2A

Skin Irritation Category 2

Signal Word: WARNING

GHS Hazard Determining Components

Silicate Solution

Silver

Hazard Statements

H303 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary Statements

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves. Wear eye protection.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P305 + P351 + P338 IF IN EYES: Remove contact lenses, if present and easy to do. Rinse cautiously with water for several minutes.

P312 IF SWALLOWED: Call a poison center or doctor if you feel unwell.

P362 Take off contaminated clothing and wash before reuse.

2.3 Other Hazards

Health Effects:

NFPA Hazard Rating: Health: 1; Fire: ND; Reactivity: ND

HMIS® Hazard Rating: Health: 1; Fire: ND; Reactivity: ND

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

Results of PBT and vPvB assessment: A chemical safety assessment has not been carried out.

PBT: ND

vPvB: ND

Emergency overview:

Appearance: Silver Paste

Immediate effects: ND

Potential health effects

Primary Routes of entry: Skin and eye contact, ingestion.

Signs and Symptoms of Overexposure: Irritation.

Eyes: Causes serious eye irritation.

Skin: Causes skin irritation.

Ingestion: Harmful if swallowed.

Inhalation: ND

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 3: Composition / Information on Ingredients

Principle Hazardous Component(s) (chemical and common name(s)) (Cas. No)	%	OSHA PEL mg/m3	ACGIH TLV mg/m3	NTP Carcinogen	IARC Carcinogen	OSHA regulated Carcinogen
Silicate Solution (1344-09-8) EC No: 215-687-4 H302 Acute Toxicity, Oral, Cat 4 H315 Skin Corrosion/Irritation, Cat 2 H319 Eye Damage/Eye Irritation, Cat 2A H335 STOT, SE; Respiratory Tract Irritation, Cat 3	10-20	NE	NE	No	No	No
Silver Flake (7440-22-4) EC No. 231-131-3	55-75	0.01	0.1	No	No	No

Water (7732-18-5)	20-30	NE	NE	No	No	No
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Note: This product is a mixture and all powders are encapsulated.

Section 4: First Aid Measures

If accidental overexposure is suspected

Eye(s) Contact: Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek immediate medical attention, preferably with an ophthalmologist.

Skin Contact: Immediately wipe excess material off skin with a dry cloth then wash with soap and water for at least 5 minutes.

Inhalation: In case of inhalation due to spray mist, machining dust or dried particulate, remove source of exposure and assure that victim is breathing. If not breathing, administer cardio-pulmonary resuscitation (CPR).

Ingestion: If swallowed, do not induce vomiting. If victim is conscious and alert, give 1-2 glasses of water to drink. Do not give anything by mouth to an unconscious person. Seek medical attention immediately.

Note to physician

Treatment: ND

Medical Conditions generally Aggravated by Exposure: Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

Section 5: Fire Fighting Measures

Flash Point: NA

Flammable Limits: This material is non-combustible.

Auto-ignition point:

Fire Extinguishing Media: This material is compatible with all extinguishing media.

Special Fire Fighting Procedures: Firefighters should wear NIOSH/MSHA approved positive pressure breathing apparatus with full face-piece and full chemical resistant protective clothing. Dike area to prevent runoff and contamination of water sources.

Dispose of fire control water later.

Unusual Fire and Explosion Hazards: This material is non-combustible.

Hazardous combustion products:

DOT Class: Not regulated.

Section 6: Accidental Release Measures

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

Personal Protection: Wear chemical goggles, body-covering protective clothing, chemical resistant gloves, and rubber boots. Use NIOSH approved respirator where mist occurs.

Spill Cleanup: Mop up and neutralize liquid, then discharge to sewer in accordance with federal, state and local regulations or permits. Flush area with water to complete cleanup. Exercise caution during neutralization as heat may be generated.

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:

Avoid contact with eyes, skin and clothing. Avoid breathing spray mist. Keep container closed. Promptly clean residue from closures with cloth dampened with water. Promptly clean up spills. Store in an area that is cool, dry, well ventilated, away from combustible material, and away from ignition sources. Keep containers closed. Store in clean plastic or stainless steel containers.

Storage temperature: Room temperature.

Storage Pressure: ND

Section 8: Exposure Controls / Personal Protection

Chemical	CAS No.	EC No.	TLV (mg/m ³)	PEL (mg/m ³)
Silicate Solution	1344-09-8	2115-687-4	ND	ND
Silver Flake	7440-22-4	231-131-3	0.1	0.01
Water	7732-18-5	NA	ND	ND

Engineering Controls

Ventilation required: Use with adequate ventilation. Keep containers closed. Safety shower and eyewash fountain should be within direct access.

Personal Protection Equipment

Respiratory protection: This product is not considered respirable in either the liquid or cured forms. However, if the cured product is polished, ground or chipped during processing, handling or use, powders may be released as airborne respirable particles. In these instances, appropriate personal protection equipment and local ventilation controls must be employed. If exposure limits are exceeded and local ventilation is unavailable, a supplied-air respirator or a self-contained NIOSH-approved dust and mist respirator is required.

Protective gloves: Wear protective gloves.

Skin protection: Wear body-covering protective clothing.

Eye protection: Wear chemical goggles.

Additional clothing and/or equipment: ND

Exposure Guidelines

See Composition/Information on Ingredients (Section 3)

Section 9 Physical and Chemical Properties

Appearance and Physical State: Silver paste.

Odor (threshold): Odorless (ND)

Specific Gravity (H₂O=1): 2.20-2.30

Vapor Pressure (mm Hg): NA

Vapor Density (air=1): ND

Percent Volatile by volume: ND

Viscosity: Paste

Evaporation Rate (butyl acetate=1): NA

Boiling Point: 100° C

Freezing point / melting point: ND

pH: 11.0-11.5

Solubility in Water: Soluble

Molecular Weight: ND

Section 10: Stability and Reactivity

Stability: This material is stable under all conditions of use and storage.

Conditions to Avoid: Prolonged contact with aluminum, brass, copper, lead, and zinc may produce flammable hydrogen gas.

Materials to Avoid (Incompatibility): Gels and heats when mixed with acid. May react with ammonium salts resulting in evolution of ammonia gas.

Hazardous Decomposition Products: None.

Hazardous Polymerization: Will not occur.

Section 11: Toxicological Information

Results of component toxicity test performed:

Acute Toxicity: Component: CAS No. 1344-09-8, Silicate Solution

LD50 Oral, 1153 mg/kg (Rat)

LD50, Inhalation, No Data

LD50, Dermal, 4640 mg/kg (Rabbit)
Skin Corrosion/Irritation: Irritating to skin
Serious Eye Damage/Irritation: Irritating to eyes
Sensitization: Not sensitizing
Mutagenicity: No data
Carcinogenicity: This product is not listed by IARC, NTP, OSHA, or ACGIH as a known or suspected carcinogen.
Reproductive Toxicity: No data
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:
Eco toxicity: This material is believed to be practically non-toxic to aquatic life.
Biodegradation: This material is inorganic and not subject to biodegradation.
Persistence: this material is believed to persist in the environment.
Bio concentration: This material is not expected to bio concentrate in organisms.
Physical/Chemical: Sinks and mixes with water. Only water will evaporate from this material
Chemical Fate Information: ND

Section 13 Disposal Considerations

RCRA 40 CFR 261 Classification: None
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.
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: Sections 311, 312:
Hazard Classes Yes/No:
Fire Hazard: No
Reactivity Hazard: No
Pressure Hazard: No
Immediate Hazard: Yes
Delayed Hazard: No
SARA Title III: Sections 302, 304, 313: This product does not contain any substances reportable under these sections.
RCRA: None of the ingredients are listed.
TSCA: All components are listed on the TSCA public inventory.
CERCLA: None of the ingredients are listed.

State Regulations

California Proposition 65: None of the ingredients are listed.

International Regulations

International Inventory Status
Canada (DSL) Yes
Europe (EINECS/ELINCS) Yes

Australia (AICS) Yes
Japan (MITI) Yes
South Korea (KECL) Yes

Canada WHMIS: ND
Europe EINECS Numbers: See Section 3.

Section 16: Other Information

Label Information: See Section 2
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

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.