



## Safety Data Sheet

**Product No. 16052 Conductive Silver Grease**

**Issue Date (04-28-14)**

**Review Date (12-19-14)**

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### Section 1: Product and Company Identification

**Product Name: Conductive Silver Grease**

Synonym: None

**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.**

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### Section 2: Hazard Identification

GHS Pictograms:

GHS Categories:



Environ Damaging

H411: Toxic to aquatic life with long lasting effects

P273: Avoid release to the environment

P391: Collect Spillage

P501: Dispose of contents/container in accordance to local/regional/national/international regulations.

**SIGNAL WORD:** Warning

**Health Effects:** Prolonged or repeated exposure by ingestion or inhalation can cause an irreversible blue-grey skin discoloration.

NFPA Hazard Rating: Health: 1; Flammability: 1; Reactivity: 0

HMIS® Hazard Rating: Health: 1; Flammability: 1; Physical Hazard: 0

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

Emergency overview

Appearance: Dark gray liquid

Immediate effects: ND

**Potential health effects**

Primary Routes of entry: Eyes, ingestion, inhalation, and skin.

Signs and Symptoms of Overexposure: ND

Eyes: Mild irritation (discomfort), mechanical irritation

Skin: No effects known.

Ingestion: None known

Inhalation: Unlikely route of entry under normal usage.

Chronic Exposure: ND

Chemical Listed As Carcinogen Or Potential Carcinogen: None Listed

See Toxicological Information (Section 11)

**Potential environmental effects**

See Ecological Information (Section 12)

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**Section 3: Composition / Information on Ingredients**

<b>Principle Hazardous Component(s) (chemical and common name(s)) (Cas. No)</b>	<b>%</b>	<b>OSHA PEL mg/m<sup>3</sup></b>	<b>ACGIH TLV mg/m<sup>3</sup></b>	<b>NTP</b>	<b>IARC</b>	<b>OSHA regulated</b>
Silver (7440-22-4)	61-67	0.01*	0.1*	No	No	No
Dimethylpolysiloxane (63148-62-9)	30-34	NE	NE	No	No	No
Carbon Black (1333-86-4)	3-5	3.5	3.5	No	No	No

\*As metal dust, mist

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**Section 4: First Aid Measures**

**If accidental overexposure is suspected**

Eye(s) Contact Remove person to fresh air (out of the contaminated zone) and keep comfortable for breathing.

Skin Contact: Clean with soap and water.

Inhalation: ND

Ingestion: Do not induce vomiting. Seek medical attention if feeling unwell.

**Note to physician**

Treatment: ND

Medical Conditions generally Aggravated by Exposure: ND

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**Section 5: Fire Fighting Measures**

Flash Point: >300 °C [572 °F]

Flammable Limits: NA

Auto-ignition point: NA

Fire Extinguishing Media: Use dry chemical, carbon dioxide, chemical foam, or water spray to extinguish. Wear self-contained breathing apparatus for firefighting.

Special Fire Fighting Procedures: At temperatures of 300 °C [150 °F] and above, formaldehyde can be generated in the presence of oxygen. Formaldehyde is classified as a human carcinogen, skin sensitizer, respiratory sensitizer, and eye and throat irritant.

Prevent fire-fighting wash from entering waterway or sewer system.

Unusual Fire and Explosion Hazards: None known.

Hazardous combustion products: Produces carbon oxides (CO, CO<sub>2</sub>) SiO<sub>2</sub> and formaldehyde

DOT Class: 9

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## **Section 6: Accidental Release Measures**

Steps to be Taken in Case Material is Released or Spilled: The material presents a slip hazard and must be cleaned thoroughly. Scoop the paste into the container. Wipe up further residue with paper towel and place dirty towels in container. Wash spill area with steam, solvents, or detergents to remove the last traces of residue.

Waste Disposal Methods: Dispose of waste according to Federal, State and Local Regulations.

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## **Section 7: Handling and Storage**

Precautions to be taken in Handling and Storage: Wear protective gloves/eye protection. Avoid release to the environment Collect spillage. Do not get in eye, on skin, or on clothing.

Storage temperature: Keep in a dry and clean area, away from incompatible substances.

Storage Pressure: NA

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## **Section 8: Exposure Controls / Personal Protection**

### **Engineering Controls**

**Ventilation required:** Normal ventilation is adequate. The carbon black particles are bound in the grease matrix and are not available as a respiration hazard under normal conditions.

If the product is exposed to extreme heat or combustion conditions, see the advice in the respiratory protection subsection.

### **Personal Protection Equipment**

**Respiratory protection:** If exposed to mist, wear oil resistant or oil proof particulate respirators or filter masks. If the product is exposed to extreme heat or combustion conditions, wear a NIOSH approved self-contained breathing apparatus (SCBA) or supplied air respirator.

Protective gloves: Wear protective gloves to prevent skin contact.

**Skin protection:** Wear appropriate protective clothing to prevent skin contact.

**Eye protection:** Wear appropriate protective eyeglasses or chemical safety goggles.

**RECOMMENDATION:** Use safety glasses with lateral protection (side shields).

Additional clothing and/or equipment: ND

### **Exposure Guidelines**

See Composition/Information on Ingredients (Section3)

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## **Section 9 Physical and Chemical Properties**

Appearance and Physical State: Dark gray liquid.

Odor (threshold): None

Specific Gravity (H<sub>2</sub>O=1): 2.29

Vapor Pressure (mm Hg): 0.13 kPa [1 mmHg]

Vapor Density (air=1): >1 (Air = 1)

Percent Volatile by volume: NA

Evaporation Rate (butyl acetate=1): NA

Boiling Point: 200°C/>392°F

Freezing point / melting point: ND

pH: NA

Solubility in Water: Insoluble

Molecular Weight: NA

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### **Section 10: Stability and Reactivity**

Stability: Stable at normal temperatures and pressures.

Conditions to Avoid: Excessive heat, and incompatible substances.

Materials to Avoid (Incompatibility): Strong oxidizing agents, strong acids, strong bases, ammonia, acetylene, hydrogen peroxide

Hazardous Decomposition Products: Will not decompose under normal conditions. For thermal decomposition, see combustion products in Section 5

Hazardous Polymerization: Will not occur.

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### **Section 11: Toxicological Information**

Results of component toxicity test performed:

**Silver:** Ingestion Guinea (LD50): > 5 gm/kg,

**Dimethylpolysiloxane:** Ingestion Rat (LD50): > 5,000 mg/kg, Inhalation (LD50): NE, Skin Rabbit (LD50): >10,000 mg/Kg, Inhalation (TCLo): NE

**Carbon Black:** Ingestion Rat (LD50): >15 g/kg, Inhalation Rat (LD50): NE, Skin Rabbit (LD50): >3 g/kg.

Sensitization: (effects of repeated exposure): Not available.

Carcinogenicity: The carbon black [1333-86-4] is possibly carcinogenic by airborne routes of exposures. Because the carbon black is bound in the highly viscous grease matrix, it is not expected to be available as an airborne hazard (dust, mist, or spray) under normal and emergency uses.

Human experience:

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

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### **Section 12: Ecological Information**

Ecological Information: VOC (Regulated Volatile Organic Content) = 31%

Chemical Fate Information: ND

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### **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.

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### **Section 14: Transportation Information**

US DOT Information: Proper shipping name: : Sizes 30 g /30 mL and under, Excepted Quantity Document as class E1

IATA: Proper shipping name: Sizes 30 g /30 mL and under, Excepted Quantity Document as class E1

Canadian TDG: Sizes 30 g /30 mL and under, Excepted Quantity Document as class E1  
Refer to Package Mark 2.6.7.1 in IATA for further instruction.

Sizes greater than 5 liter ENVIRONMENTALLY HAZARDOUS SUBSTANCE,  
SOLID, N.O.S. (silver powder) Class: 9 Packing Group: III

Marine Pollutant: Not listed in 49CFR

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## **Section 15: Regulatory Information**

### **United States Federal Regulations**

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

CAA (Clean Air Act, USA)

This product does not contain any class 1 ozone depleting substances.

This product does not contain any class 2 ozone depleting substances.

This product does not contain any chemicals listed as hazardous air pollutants.

SARA: Superfund Amendments and Reauthorization Act of 1986, USA, 40 CFR 372.4)

None of the chemicals in this product have a reportable quantity.

SARA Title III: This product does not contain any chemicals subject to the reporting requirements of section 313 Title III of the SARA of 1986 and 40 CFR part 372.

RCRA: ND

TSCA: All substances are TSCA listed.

CERCLA: Silver, RQ: 1000 lbs (454 Kg). The RQ for these hazardous substances is limited to those pieces of the metal having a diameter smaller than 100 micrometers (0.004 inches).

### **State Regulations**

California Proposition 65: This product does not contain any chemicals listed.

### **International Regulations**

Canada WHMIS: D2B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the Controlled Products Regulations.

DSL: All ingredients in this product are listed on the Domestic Substances List

Europe EINECS Numbers: ND

RoHS: This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, or PBDE's, and complies with European RoHS regulations.

WEEE: This product is not a piece of electrical or electronics equipment, and is therefore not governed by this regulation.

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## **Section 16: Other Information**

Label Information: May cause eye irritation, Keep out of reach of children.

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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**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.

MSDS Form 0013F1 V3