

**Safety Data Sheet**

**Product No. 16058 Graphite Aerosol**  
**Issue Date (01-07-15)**  
**Review Date (08-31-17)**

**Section 1: Product and Company Identification**

**Product Name:**

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:



Flammable



Irritant

GHS Categories:

GHS07: Irritant

GHS02: Flammable

HAZARD CLASS	HAZARD CATEGORY
Flammable Aerosol	2
Skin Irritation	2
Eye Irritation	2A
Skin Sensitization	1
Specific Target Organ Toxicity – Single Exposure	3

**Signal Word: Warning**

**Hazard Statements:**

Flammable Aerosol.

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

May cause drowsiness or dizziness.

**Precautionary Statements:**

Prevention: Keep away from heat, sparks, open flames, hot surfaces - no smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Avoid breathing mist or spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear eye and face protection. Wear protective gloves.

Response: IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. Call a poison control center or physician if you feel unwell. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**Health Effects:**

NFPA Hazard Rating: Health: ND; Fire: ND; Reactivity: ND  
 HMIS® Hazard Rating: Health: ND; Fire: ND; Reactivity: ND  
 (0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

Results of PBT and vPvB assessment:

PBT: Not applicable  
 vPvB: Not applicable

**Emergency overview:**

Appearance: Aerosol  
 Immediate effects: ND

**Potential health effects**

Primary Routes of entry: Skin, Inhalation, Eyes

Signs and Symptoms of Overexposure: ND

Eyes: This product may be severely irritating to the eyes.

Skin: Prolonged and/or repeated skin contact with this product may cause irritation/dermatitis. Prolonged or repeated contact with this product may dry and/or defat the skin. Product contains components which may be absorbed through the skin.

Ingestion: This product is harmful or fatal if swallowed. Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. Small amounts of this product, if aspirated into the lungs, may cause mild to severe pulmonary injury. Ingestion of this product may result in central nervous system effects including headache, sleepiness, dizziness, slurred speech and blurred vision.

Inhalation: This product is irritating to the respiratory system. Excessive inhalation of this material causes headache, dizziness, nausea and incoordination. Repeated inhalation may be harmful; lung irritation and serious central nervous system disorders may result.

Chronic Exposure: Continued overexposure may result in coma, respiratory arrest, and death.

Chemical Listed As Carcinogen Or Potential Carcinogen: None

See Toxicological Information (Section 11)

**Potential environmental effects**

See Ecological Information (Section 12)

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

Principle Hazardous Component(s) (chemical and common name(s))	%	OSHA PEL mg/m3	ACGIH TLV mg/m3	NTP Carcinogen	IARC Carcinogen	OSHA regulated Carcinogen
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(Cas. No)						
n-Heptane (142-82-5)	30-60	500 ppm (2,000 mg/m <sup>3</sup> ) PEL	400 ppm TWA 500 ppm STEL	No	No	No
2-Propanol (67-63-0)	10-30	400 ppm (980 mg/m <sup>3</sup> ) PEL	200 ppm TWA 400 ppm STEL	No	No	No
Propane (74-98-6)	10-30	1,000 ppm (1,800 mg/m <sup>3</sup> ) PEL	Included in the regulation but with no data values. See regulation for further details	No	No	No
Butane (106-97-6)	1-5	None	1,000 ppm STEL	No	No	No
Methylcyclohexane (108-87-2)	1-5	500 ppm (2,000 mg/m <sup>3</sup> ) PEL	400 ppm TWA	No	No	No
Octane (111-65-9)	1-5	500 ppm (2,350 mg/m <sup>3</sup> ) PEL	300 ppm TWA	No	No	No
Graphite (7782-42-5)	1-5	5 mg/m <sup>3</sup> PEL Respirable fraction. 15 mg/m <sup>3</sup> PEL Total dust. 15 MPPCF TWA	2 mg/m <sup>3</sup> TWA Respirable fraction.	No	No	No

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#### Section 4: First Aid Measures

##### If accidental overexposure is suspected

Eye(s) Contact: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin Contact: Immediately wash skin thoroughly with soap and water. Obtain medical attention if irritation persists.

Inhalation: If mist or vapor of this product is inhaled, remove person immediately to fresh air. Seek medical attention if symptoms develop or persist.

Ingestion: Get immediate medical attention. Do not induce vomiting.

##### Note to physician

Treatment: This material, if aspirated into the lungs, may cause chemical pneumonitis; treat the affected person appropriately.

Medical Conditions generally Aggravated by Exposure: ND

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#### Section 5: Fire Fighting Measures

Flash Point: -4 °C (24.8 °F) Closed cup

Flammable Limits: lower: 1.05 %, upper: 6.7 %

Auto-ignition point: > 204 °C (> 399.2 °F)

Fire Extinguishing Media: NFPA Class B extinguishers (carbon dioxide or foam) for Class I B liquid fires. In case of fire, keep containers cool with water spray.

Special Fire Fighting Procedures: Wear full protective clothing. Wear self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: DANGEROUS when exposed to heat or flame. This material can be ignited by flame or spark under all normal atmospheric conditions. If product is heated above its flash point it will release flammable vapors which can burn in the open or be explosive in confined spaces if exposed to ignition source. Mists or sprays may be flammable below the normal flash point.

Hazardous combustion products: Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

DOT Class: flammable

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## Section 6: Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled: Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Wear appropriate protective equipment and clothing during clean-up. Remove all sources of ignition. Do not allow product to enter sewer or waterways. Evacuate the area promptly and keep upwind of the spilled material. Isolate the spill area to prevent people from entering.

Clean-up methods: Absorb spill with inert material. Shovel material into appropriate container for disposal.

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: Avoid contact with eyes, skin and clothing. Do not inhale vapors and fumes. Use only with adequate ventilation. Wash thoroughly after handling. Keep away from heat, spark and flame. For industrial use only. Do not take internally. Use non-sparking tools when opening or closing containers. Ground and bond all equipment as required (when transferring products).

Storage temperature: For safe storage, store between 5.0 °C (41°F) and 30.0 °C (86°F)

Store in a cool, dry, well-ventilated area. Keep away from heat, spark and flame. Keep container closed.

Temperatures between + 5 °C and + 30 °C. Outside temperature limits, the properties of the product will change. Store in original container until ready to use. Keep out of reach of children and away from food and drink. Ground and bond metal containers for liquid transfer to avoid static sparks. Protect from direct sunlight. Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Do not pressurize, cut, heat or weld containers. Empty product containers may contain product residue. Do not reuse empty containers.

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## Section 8: Exposure Controls / Personal Protection

### Engineering Controls

Ventilation required: Ventilation should effectively remove and prevent buildup of any vapor/mist/fume/dust generated from the handling of this product.

### Personal Protection Equipment

Respiratory protection: If ventilation is not sufficient to effectively prevent buildup of aerosols, mists or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.

Skin protection: Wear impervious gloves for prolonged contact. Gloves should be tested to determine suitability for prolonged contact. Use of impervious apron and boots are recommended.

Eye/face protection: Wear chemical goggles; face shield (if splashing is possible).

Additional clothing and/or equipment:

### Exposure Guidelines

See Composition/Information on Ingredients (Section 3)

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## Section 9 Physical and Chemical Properties

Appearance and Physical State: Black, Aerosol

Odor: Hydrocarbon-like

Odor (threshold): Not available

Specific Gravity (H<sub>2</sub>O=1): 0.684

Vapor Pressure (mm Hg): 40 mm hg (20 °C (68°F))

Vapor Density (air=1): Not available

Percent Volatile by volume: ND

Evaporation Rate (butyl acetate=1): Not available

Boiling Point range: 98 °C (208.4 °F)

Melting point range: < -91 °C (< -131.8 °F)

pH: Not applicable

Solubility in Water: Negligible

Molecular Weight: NA

VOC content: 693 g/l

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### Section 10: Stability and Reactivity

Stability: Stable at normal conditions.

Conditions to Avoid: Avoid excessive heat and ignition sources.

Materials to Avoid (Incompatibility): This product may react with oxidizing agents.

Hazardous Decomposition Products: Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Hazardous Polymerization: None under normal processing.

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### Section 11: Toxicological Information

Results of component toxicity test performed:

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
n-Heptane	Inhalation LC50 (RAT, 4 h) = 103 mg/l	Central nervous system, Irritant
2-Propanol	Oral LD50 (RAT) = 5,045 mg/kg Oral LD50 (RABBIT) = 6,410 mg/kg Oral LD50 (RAT) = 4.7 g/kg Oral LD50 (RABBIT) = 8.0 g/kg Oral LD50 (RABBIT) = 5.03 g/kg Dermal LD50 (RABBIT) = 12,800 mg/kg	Allergen, Blood, Brain, Central nervous system, Irritant, Kidney, Liver, Spleen
Propane	Inhalation LC50 (RAT, 15 min) = > 1,442.847 mg/l Inhalation LC50 (RAT, 15 min) = > 1,464 mg/l	Cardiac, Central nervous system, Irritant
Butane	Inhalation LC50 (RAT, 4 h) = 658 mg/l	Cardiac, Central nervous system, Irritant
Methylcyclohexane	None	Central nervous system, Irritant, Kidney, Liver
Octane	Inhalation LC50 (RAT, 4 h) = 118 mg/l	Central nervous system, Irritant, Lung
Graphite	None	Lung

Human experience: ND

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: Not available. Do not empty into drains, soil or bodies of water.

Chemical Fate Information: ND

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### Section 13 Disposal Considerations

Information provided is for unused product only.

RCRA 40 CFR 261 Classification: If discarded, this product is considered a RCRA ignitable waste, D001.

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: Aerosols, flammable

Hazard Class: 2.1

Packaging group: None

UN Number: UN1950

IATA: Proper shipping name: Aerosols, flammable

Hazard Class: 2.1

Packing group: None

UN Number: UN1950

IMO: Proper shipping name: AEROSOLS

Class: 2.1

UN Number: UN1950

Packing group: None

Marine Pollutant: No

Canadian TDG: Proper shipping name: Aerosols, flammable

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## **Section 15: Regulatory Information**

### **United States Federal Regulations**

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

SARA Section 302 EHS: None above reporting de minimis.

SARA: Section 311/312: Immediate Health, Delayed Health, Fire.

SARA Title III: None above reporting de minimis.

RCRA: If discarded, this product is considered a RCRA ignitable waste, D001.

TSCA: TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA: None above reporting de minimis.

### **State Regulations**

California Proposition 65: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. This product contains a chemical known in the State of California to cause cancer.

### **International Regulations**

Canada WHMIS: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

Europe EINECS Numbers: ND

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## **Section 16: Other Information**

Label Information: Flammable.

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.