

## SAFETY DATA SHEET

**Product No. 16051 PELCO® Conductive Graphite**

**Issue Date (12/9/2024)**

**Review Date (12/9/2024) Rev. 01**

### Section 1: Product and Company Identification

**Product Name: PELCO® Conductive Graphite**

**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

**Classification of the substance or mixture.**

**Signal Word: WARNING**

**GHS Categories:**

GHS07 – Irritant

Skin Irritant:

**Label elements**

GHS Pictograms:



GHS07

**Hazard Statements**

H317

May cause an allergic skin reaction.

**Precautionary Statements**

**Prevention:**

P261

Avoid breathing vapors, mist or spray.

P272

Contaminated work clothing should not be allowed out of the workplace.

P280

Wear protective gloves.

**Response:**

P302+P352

IF ON SKIN: Wash with plenty of water.

P333+P313

If skin irritation or rash occurs: Get medical attention.

P363

Wash contaminated clothing before reuse.

**Disposal:**

P501

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)

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### Section 3: Composition / Information on Ingredients

<u>Hazardous Component(s)</u>	<u>CAS Number</u>	<u>EINECS Number</u>	<u>% w/w*</u>
Graphite	7782-42-5	231-955-3	10-20%
Ammonium hydroxide	1336-21-6	215-647-6	0.1-1%

\* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

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### Section 4: First Aid Measures

<b>Inhalation:</b>	If inhaled, immediately remove the affected person to fresh air. If symptoms develop and persist, get medical attention.
<b>Skin Contact:</b>	Immediately wash skin thoroughly with soap and water. If symptoms develop and persist, get medical attention.
<b>Eye(s) Contact:</b>	Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Seek medical attention at once.
<b>Ingestion:</b>	Get immediate medical attention. Do NOT induce vomiting.
<b>Symptoms:</b>	See Section 11
<b>Note to physician:</b>	Treat symptomatically and supportively.

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### Section 5: Fire Fighting Measures

<b>Extinguishing media:</b>	Water spray (fog), foam, dry chemical or carbon dioxide.
<b>Specific firefighting procedures:</b>	Wear full protective clothing. Wear self-contained breathing apparatus.
<b>Unusual fire or explosion hazards:</b>	Not a fire hazard. This product is an aqueous mixture which will not burn.
<b>Hazardous combustion products:</b>	Thermal decomposition can lead to release of irritating gases and vapors.

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### Section 6: Accidental Release Measures

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.
- Do not allow product to enter sewer or waterways.

#### Clean-up methods:

- Absorb spill with inert material.
  - Shovel material into appropriate container for disposal.
  - Dispose in according to Federal, State and local governmental regulations.
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### Section 7: Handling and Storage

<b>Precautions for safe handling:</b>	Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists of this product. Use only with adequate ventilation.
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<b>Conditions for safe storage:</b>	Store between 10.0 – 30.0°C (50 -86°F). Store in a cool, dry, well-ventilated area. Protect from freezing. Mix well before using.
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## Section 8: Exposure Controls / Personal Protection

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

<u>Hazardous Component(s)</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>AIHA WEEL</u>	<u>OTHER</u>
Graphite	2 mg/m <sup>3</sup> TWA Respirable fraction	5 mg/m <sup>3</sup> PEL Respirable fraction 15 mg/m <sup>3</sup> PEL Total dust Respirable fraction	None	None
Ammonium hydroxide	35 ppm STEL 25ppm TWA	50 ppm (35 mg/m <sup>3</sup> ) PEL	None	None

### Engineering controls:

Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors, or mists generated from the handling of this product.

### Respiratory protection:

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

### Eye/face protection:

Wear safety glasses; chemical goggles (if splashing is possible).

### Skin protection:

Chemical resistant, impermeable gloves. Gloves should be tested to determine suitability for prolonged contact. Use of impervious apron and boots are recommended.

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## Section 9 Physical and Chemical Properties

Appearance	Liquid
Color	Black
Odor	Ammonia
Odor threshold	Not available
pH	10.0 - 12.0
Melting point/range	Not applicable, product is a liquid
Boiling point/range	100°C (212°F) calculated
Flash point	Not applicable
Flammability (solid, gas)	The product is not flammable
Auto-ignition temperature	Not applicable
Upper explosion/flammability limit	Not available
Lower explosion/flammability limit	Not available
Vapor density	<120°C
Evaporation rate	Not available
Solubility in H <sub>2</sub> O	Miscible, disperses in water as a suspension
Partition coefficient (n-octanol/water)	Not available
Viscosity	<200 mPa.s
Decomposition temperature	Not available
VOC content	0%

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## Section 10: Stability and Reactivity

### Stability:

Stable at normal conditions.

### Hazardous reactions:

None under normal processing.

### Hazardous decomposition products:

Thermal decomposition can lead to release of irritating gases and vapors.

### Incompatible materials:

This product may react with strong acids or oxidizing agents.

### Reactivity:

Not available.

### Conditions to avoid:

No thermal decomposition is used according to specifications.  
Avoid excessive heat and ignition sources. Freezing conditions

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## Section 11: Toxicological Information

**Relevant routes of exposure:** Skin, Inhalation, Eyes, Ingestion

**Potential Health Effects/Symptoms:**

Inhalation:	This product is irritating to the respiratory system.
Skin contact:	May cause skin irritation. May cause skin sensitization.
Eye contact:	May cause irritation.
Ingestion:	Can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Hazardous Component(s)**

**LD50's and LC50's**

**Immediate and Delayed Health Effects**

Graphite	Inhalation LC (Rat, 4h)=>2,000 mg/m <sup>3</sup>	Lungs
Ammonium hydroxide	Oral LD50 (Rat)=350mg/kg	Irritant, Corrosive

**Hazardous Component(s)**

**OSHA Carcinogen**  
(specifically regulated)

**NTP Carcinogen**

**IARC Carcinogen**

Graphite	No	No	No
Ammonium hydroxide	No	No	No

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## Section 12: Ecological Information

**Ecological information:** Do not empty into drains/surface water/ground water

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## Section 13 Disposal Considerations

(Information provided is for unused product only)

**Recommended method of disposal:** Dispose of according to Federal, State and local governmental regulations.

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## Section 14: Transportation Information

**U.S. Department of Transportation Ground (49 CFR)**

UN-Number	None
UN-Proper shipping name	Not regulated
Transport hazard class(es)	None
Packing Group	None

**International Air Transportation (ICAO/IATA)**

UN-Number	None
UN-Proper shipping name	Not regulated
Transport hazard class(es)	None
Packing Group	None

**Water Transportation (IMO/IMDG)**

UN-Number	None
UN-Proper shipping name	Not regulated
Transport hazard class(es)	None
Packing Group	None

**Special precautions for user**

*The transport classification(s) provided herein are for information purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet (SDS). Transportation classifications may vary by mode of transportation, package size, and variations in regional or country regulations.*

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## Section 15: Regulatory Information

### United States Regulatory Information

TSCA 8 (b) Inventory Status:	All components are listed as active or are exempt from listing on the Toxic Substances Control Act (TSCA) inventory
TSCA 12 (b) Export Notification:	None above reporting de-minimis.
CERCLA/SARA Section 302 EHS:	None above reporting de-minimis.
CERCLA/SARA Section 311/312:	Immediate Health.
CERCLA/SARA Section 313:	None above reporting de-minimis.
California Prop 65:	This product contains a chemical known in the State of California to cause cancer.

### Canada Regulatory Information

CEPA DSL/NDL Status:	All components are listed on or are exempt from listing on the Canadian Domestic Substances list.
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## Section 16: Other Information

This Safety Data Sheet (SDS) is intended to comply with the 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).

### Full text of other abbreviations

ACGIH:	USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI:	ACGIH - Biological Exposure Indices (BEI)
NIOSH REL:	USA. NIOSH Recommended Exposure Limits
OSHA Z-1:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
OSHA Z-2:	USA. Occupational Exposure Limits (OSHA) - Table Z-2
US WEEL:	USA. Workplace Environmental Exposure Levels (WEEL)
ACGIH / TWA:	8-hour, time-weighted average
ACGIH / STEL:	Short-term exposure limit
NIOSH REL/TWA:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL/ST:	STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
OSHA Z-1 / TWA:	8-hour time weighted average
OSHA Z-2/TWA:	8-hour time weighted average
OSHA Z-2/CEIL:	Acceptable ceiling concentration
OSHA Z-2/Peak:	Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift
US WEEL/TWA:	8-hr TWA

AICS - Australian Inventory of Chemical Substances;

AIIC - Australian Inventory of Industrial Chemicals;

ASTM - American Society for the Testing of Materials;

bw - Body weight;

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act;

CMR - Carcinogen, Mutagen or Reproductive Toxicant;

DIN - Standard of the German Institute for Standardization;

DOT - Department of Transportation;

DSL - Domestic Substances List (Canada);

ECx - Concentration associated with x% response;

EHS - Extremely Hazardous Substance;

ELx - Loading rate associated with x% response;

EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan);

ErCx - Concentration associated with x% growth rate response;

ERG - Emergency Response Guide;

GHS - Globally Harmonized System;

GLP - Good Laboratory Practice;  
HMIS - Hazardous Materials Identification System;  
IARC - International Agency for Research on Cancer;  
IATA - International Air Transport Association;  
IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk;  
IC50 - Half maximal inhibitory concentration;  
ICAO - International Civil Aviation Organization;  
IECSC - Inventory of Existing Chemical Substances in China;  
IMDG - International Maritime Dangerous Goods;  
IMO - International Maritime Organization;  
ISHL - Industrial Safety and Health Law (Japan);  
ISO - International Organization for Standardization;  
KECI - Korea Existing Chemicals Inventory;  
LC50 - Lethal Concentration to 50 % of a test population;  
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose);  
MARPOL - International Convention for the Prevention of Pollution from Ships;  
MSHA - Mine Safety and Health Administration;  
n.o.s. - Not Otherwise Specified;  
NFPA - National Fire Protection Association;  
NO(A)EC - No Observed (Adverse) Effect Concentration;  
NO(A)EL - No Observed (Adverse) Effect Level;  
NOELR - No Observable Effect Loading Rate;  
NTP - National Toxicology Program;  
NZIoC - New Zealand Inventory of Chemicals;  
OECD - Organization for Economic Co-operation and Development;  
OPPTS - Office of Chemical Safety and Pollution Prevention;  
PBT - Persistent, Bioaccumulative and Toxic substance;  
PICCS - Philippines Inventory of Chemicals and Chemical Substances;  
(Q)SAR - (Quantitative) Structure Activity Relationship;  
RCRA - Resource Conservation and Recovery Act;  
REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals;  
RQ - Reportable Quantity;  
SADT - Self-Accelerating Decomposition Temperature;  
SARA - Superfund Amendments and Reauthorization Act;  
SDS -Safety Data Sheet;  
TCSI - Taiwan Chemical Substance Inventory;  
TSCA - Toxic Substances Control Act (United States);  
UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods;  
vPvB - Very Persistent and Very Bioaccumulative

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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.