Section 1: Product and Company Identification
Product Name: PELCO® Conductive Graphite, Water base
Synonym: Aquadag® E Colloidal Graphite
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: Hazard Identification
GHS Pictograms:

GHS Categories:
Hazard class: Hazard category:
Skin irritation 2
Eye irritation 2A

Signal Word: Warning

Precautionary Statements:
Prevention:
Wash thoroughly after handling. Wear eye and face protection. Wear protective gloves.
Response:
If on skin: Wash with plenty of soap and water. Take off contaminated clothing. If skin irritation occurs: Get medical attention.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. If eye irritation persists. Get medical attention.
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: NA
vPvB: NA

Emergency overview
Appearance: Black liquid paint.
Immediate effects: ND

Potential health effects
Primary Routes of entry: Inhalation, ingestion, eye and skin contact.
Signs and Symptoms of Overexposure: ND
Eyes: Causes serious eye irritation. This product is severely irritating to the eyes. May cause permanent visual impairment. Vapors may also produce eye irritation.
Skin: Causes skin irritation. This product is irritating to the skin.
Ingestion: Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Inhalation: This product is irritating to the respiratory system. Excessive inhalation of this material causes headache, dizziness, nausea and incoordination.
Chronic Exposure: ND
Chemical Listed As Carcinogen Or Potential Carcinogen: None
See Toxicological Information (Section 11)

Potential environmental effects
See Ecological Information (Section 12)

Section 3: Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Principle Hazardous Component(s) (chemical and common name(s)) (Cas. No)</th>
<th>%*</th>
<th>OSHA PEL mg/m³</th>
<th>ACGIH TLV mg/m³</th>
<th>NTP Carcinogen</th>
<th>IARC Carcinogen</th>
<th>OSHA regulated Carcinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphite (7782-42-5)</td>
<td>5-10</td>
<td>5 PEL Respirable fraction. 15 mg/m³ PEL Total dust. 15 MPPCF TWA</td>
<td>2 TWA Respirable fraction</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Ammonium hydroxide (1336-21-6)</td>
<td>1-5</td>
<td>ND</td>
<td>ND</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.
Section 4: First Aid Measures
If accidental overexposure is suspected
Eye(s) Contact: Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Seek medical attention at once.
Skin Contact: Remove contaminated clothing and footwear. Immediately wash skin thoroughly with soap and water. If symptoms develop and persist, get medical attention.
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. Never give anything by mouth to a victim who is unconscious or is having convulsions.
Note to physician
Treatment: Treat symptomatically and supportively.
Medical Conditions generally Aggravated by Exposure: ND

Section 5: Fire Fighting Measures
Flash Point: NA
Flammable Limits: NA
Auto-ignition point: NA
Fire Extinguishing Media: Water spray (fog), foam, dry chemical or carbon dioxide.
Special Fire Fighting Procedures: Wear full protective clothing. Wear self-contained breathing apparatus.
Unusual Fire and Explosion Hazards: Not a fire hazard.
Hazardous combustion products: Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Oxides of nitrogen.
DOT Class: None

Section 6: Accidental Release Measures
Steps to be Taken in Case Material is Released or Spilled: 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.
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:
Handling: Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.
Avoid breathing vapors or mists of this product. Use only with adequate ventilation. Do not take internally. For industrial use only.
Storage: For safe storage, store between 5.0 °C (41°F) and 30.0 °C (86°F)
Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Protect from freezing.
Storage temperature: In cool area, protect from freezing.
Storage Pressure: ND

Section 8: Exposure Controls / Personal Protection

Engineering Controls
Ventilation required: Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists 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.
Protective gloves: Wear impervious gloves for prolonged contact.
Skin protection: Use of impervious apron and boots are recommended.
Eye protection: Wear safety glasses; chemical goggles (if splashing is possible).
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: Black Liquid.
Odor (threshold): Ammoniacal (ND)
Specific Gravity (H₂O=1): 1.12
Vapor Pressure (mm Hg): NE
Vapor Density (air=1): NE
Percent Volatile by volume: NE
Viscosity: ≤10,000 cp
Evaporation Rate (butyl acetate=1): NA
Boiling Point: ≥100 °C (≥ 212°F)
Freezing point / melting point: ≤ 0 °C (≤ 32°F)

pH: 10 - 10.5
Solubility in Water: Dispersible
Molecular Weight: NA

Section 10: Stability and Reactivity
Stability: Stable at normal conditions.
Conditions to Avoid: Keep away from heat and incompatible materials.
Materials to Avoid (Incompatibility): Copper. Zinc. Aluminum. This product reacts with acids.
Hazardous Decomposition Products: Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Oxides of nitrogen.
Hazardous Polymerization: Will not occur.
Section 11: Toxicological Information
Results of component toxicity test performed:

<table>
<thead>
<tr>
<th>Hazardous Component(s)</th>
<th>LD50s and LC50s</th>
<th>Immediate and Delayed Health Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphite</td>
<td>None</td>
<td>Lung</td>
</tr>
<tr>
<td>Ammonium hydroxide</td>
<td>Oral LD50 (RAT) = 350 mg/kg</td>
<td>Irritant, Corrosive</td>
</tr>
</tbody>
</table>

Carcinogens: No, See Section 3.
Human experience: See Section 2 for Potential Health Effects/Symptoms.
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: ND
Chemical Fate Information: ND

Section 13 Disposal Considerations
RCRA 40 CFR 261 Classification: Material, if discarded, is not expected to be a characteristic hazardous waste under RCRA. Wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.
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.
IMO: Proper shipping name: Not regulated.
Marine Pollutant: No
Canadian TDG: Not regulated.

Section 15: Regulatory Information
United States Federal Regulations
SARA: Section 302 EHS: None above reporting de minimis
SARA Title III: Section 311/312: Immediate Health.
Section 313: This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372): Ammonium hydroxide (CAS# 1336-21-6)
RCRA: ND
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: Ammonium hydroxide (CAS# 1336-21-6), RQ = 1000 lbs (454 Kg).
State Regulations
California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

International Regulations
Canada WHMIS:
Canada Regulatory Information, CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.
Europe EINECS ND

Section 16: Other Information
Label Information: Irritant.
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.

SDS Form 0013F1V4