Section 1: Product and Company Identification
Product Name: PELCO® Colloidal Graphite
Synonym: Dag 154
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
GHS Hazard Pictograms

GHS Categories
GHS02 – Flammable
   Flam. Liq. 2 H225: Highly flammable liquid and vapor

GHS08 – Health Hazard
   H318: Causes serious eye damage
   H336: May cause drowsiness or dizziness

Hazard Statements:
H225 Highly flammable liquid and vapor.
H318 Causes serious eye damage.
H336 May cause drowsiness or dizziness.

Precautionary Statements:
P210 Keep away from heat, sparks, open flames, hot surfaces. No smoking.
P233 Keep container tightly closed.
P241 Use explosion-proof equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P260 Do not breathe dust/fume/gas/vapors/spray.
P264 Wash hands thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves, eye protection, and face protection.
P303+P361 In on skin (or hair): Take off immediately all contaminated clothing.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+ P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P370+P378 In case of fire: Use foam, dry chemical or carbon dioxide to extinguish.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P235 Keep cool.
P405 Store locked up.
P501 Dispose of contents and/or container in accordance with local/regional/national and federal regulations.

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>2-Propanol (67-63-0)</td>
<td>60-100</td>
<td>980 mg/m3 400 ppm</td>
<td>200 ppm TWA 400 ppm STEL</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Graphite (7782-42-5)</td>
<td>10-30</td>
<td>5 mg/m3 Respirable fraction. 15 mg/m3 PEL Total dust.</td>
<td>2 mg/m³ TWA Respirable fraction.</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>n-Butyl alcohol (71-36-3)</td>
<td>1-5</td>
<td>300 mg/m3 100 ppm</td>
<td>20 ppm</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>1-Methoxy-2-propanol (107-98-2)</td>
<td>1-5</td>
<td>NE</td>
<td>50 ppm TWA 100 ppm STEL</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
Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Skin Contact: Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. Wash clothing before reuse. Get medical attention.

Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.
### Section 5: Fire Fighting Measures

<table>
<thead>
<tr>
<th>Extinguishing Media:</th>
<th>Water spray (fog), foam, dry chemical or carbon dioxide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Fire Fighting Procedures:</td>
<td>Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. In case of fire, keep containers cool with water spray.</td>
</tr>
<tr>
<td>Unusual Fire and Explosion Hazards:</td>
<td>Closed containers may rupture (due to buildup of pressure) when exposed to extreme heat.</td>
</tr>
<tr>
<td>Hazardous Combustion Products:</td>
<td>Carbon dioxide, carbon monoxide, and hydrocarbons.</td>
</tr>
<tr>
<td>DOT Class:</td>
<td>Flammable</td>
</tr>
</tbody>
</table>

### 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: | Do not allow product to enter sewer or waterways. |
| Clean-up methods: | Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during clean-up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up as much material as possible. Store in a partly filled, closed container until disposal. Wash spillage site thoroughly with soap and water or detergent solution. |
| Waste Disposal Methods: | Dispose of waste according to Federal, State and Local Regulations. |

### Section 7: Handling and Storage

Handling: Use only with adequate ventilation. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. (Refer to Section 8)

Storage: For safe storage, store between 5.0 °C (41°F) - 30.0 °C (86°F). Keep container closed. Store in a cool, dry, well-ventilated area. Storage within given temperature limit. 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. Protect from direct sunlight.

### Section 8: Exposure Controls / Personal Protection

<table>
<thead>
<tr>
<th>Engineering Controls:</th>
<th>Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory Protection:</td>
<td>Use NIOSH approved respirator if there is potential to exceed exposure limit(s).</td>
</tr>
<tr>
<td>Eye/Face Protection:</td>
<td>Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists. Safety showers and eye wash stations should be available.</td>
</tr>
<tr>
<td>Skin Protection:</td>
<td>Use impermeable gloves and protective clothing as necessary to prevent skin contact.</td>
</tr>
</tbody>
</table>
Section 9 Physical and Chemical Properties
Physical State: Liquid
Color: Black
Odor: Alcohol
Odor Threshold: 7.5 ppm
pH: NA
Vapor Pressure: 33 mm Hg
Boiling Point/Range: 82 °C
Melting Point/Range: -88.8 °C (-127.8°F)
Specific Gravity: 0.89
Vapor Density: 2.07 (Air=1)
Flash Point: 11.6 °C (52.88 °F) Tagliabue closed cup
Flammable/Explosive Limits: Lower 2%
Flammable/Explosive Limits: Upper 12%
Auto-ignition Temperature: 398.8 °C (749.84 °F)
Flammability: NA
Evaporation Rate: 2.9 (Butyl acetate)
Partition Coefficient: (n-octanol/water) -0.14
VOC Content: 710 g/l (calculated)
Viscosity: 200-800cp
Decomposition Temperature: NA

Section 10: Stability and Reactivity
Stability: Stable under normal conditions of storage and use.
Hazardous Reactions: None under normal processing
Reactivity: NA
Conditions to avoid: High temperatures. Oxidizing conditions.
Section 11: Toxicological Information

Relevant Routes of Exposure: Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

**Inhalation**
Inhalation of vapors or mists of the product may be irritating to the respiratory system. Breathing high concentrations of vapor may cause anesthetic effects. Excessive inhalation of this material causes headache, dizziness, nausea and incoordination.

**Skin Contact:**
Prolonged or excessive skin contact with this product may cause mild skin irritation. A component in this product may be absorbed through the skin, especially if skin is damaged. Repeated exposure may cause skin dryness or cracking. Dermatitis.

**Eye Contact:**
Causes eye irritation. Exposure to vapor may cause tearing of the eyes, irritation and burning sensation.

**Ingestion:**
Principal hazard of ingestion is aspiration into the lungs and subsequent pneumonitis. May irritate mouth, throat, and stomach if swallowed. May cause central nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

<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>2-Propanol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral LD50 (Rat) = 5,045 mg/kg</td>
<td></td>
<td>Allergen, Central nervous system, Irritant</td>
</tr>
<tr>
<td>Oral LD50 (Mouse) = 3,600 mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral LD50 (Rabbit) = 6,410 mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral LD50 (Rat) = 4.7 g/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral LD50 (Mouse) = 4.5 g/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral LD50 (Rabbit) = 8.0 g/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral LD50 (Rabbit) = 5.03 g/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal LD50 (Rabbit) = 12,800 mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graphite</td>
<td>Inhalation LC50 (Rat, 4 h) = &gt; 2,000 mg/m³</td>
<td>Lung</td>
</tr>
<tr>
<td></td>
<td>Inhalation LC50 (Rat, 4 h) = &gt; 2,000 mg/m³</td>
<td></td>
</tr>
<tr>
<td>n-Butyl alcohol</td>
<td>Oral LD50 (Rat) = 790 mg/kg</td>
<td>Allergen, Central nervous system</td>
</tr>
<tr>
<td></td>
<td>Dermal LD50 (Rabbit) = 3,400 mg/kg</td>
<td></td>
</tr>
<tr>
<td>1-methoxy-2-propanol</td>
<td>Oral LD50 (Rat) = 36 g/kg</td>
<td>Central nervous system, Developmental, Irritant</td>
</tr>
<tr>
<td></td>
<td>Oral LD50 (Rat) = 5.71 g/kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oral LD50 (Rat) = 7.51 g/kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oral LD50 (Mouse) = 10.8 g/kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oral LD50 (Rabbit) = 5.3 g/kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dermal LD50 (Rabbit) = 13 g/kg</td>
<td></td>
</tr>
</tbody>
</table>

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: Do not empty into drains / surface water / ground water.

Section 13 Disposal Considerations

Information provided is for unused product only

Recommended Method of Disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous Waste Number: 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.
Section 14: Transportation Information
The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)
Proper shipping name: Paint
Hazard class or division: 3
Identification number: UN 1263
Packaging group: II

International Air Transportation (IUCAO/IATA)
Proper shipping name: Paint
Hazard class or division: 3
Identification number: UN 1263
Packaging group: II

Water Transportation (IMO/IMDG)
Proper shipping name: Paint
Hazard class or division: 3
Identification number: UN 1263
Packaging group: II

Section 15: Regulatory Information

United States Regulatory Information
TSCA 8 (b) Inventory Status: All components are listed 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, Fire
CERCLA/SARA 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). n-Butyl alcohol (CAS# 71-36-3).
CERCLA reportable Quantity: 2-Propanol (CAS# 67-63-0) 100lbs. (45.4 kg)
California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information
CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

Section 16: Other Information
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