Material Safety Data Sheet
Product No. 18181, 18182 Benzoyl Peroxide Powder (Component of 18181, 18182 Kit)

Issue Date (11-28-01)
Review Date (05-24-12)
MSDS Information provided by London Resin Co LTD, Issued 11-28-01 and reviewed 2010.

Section 1: Product and Company Identification
Product Name: 18181, 18182 Benzoyl Peroxide Paste (Component of 18181, 18182 Kit)
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.

Section 2: Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Principle Hazardous Component(s)</th>
<th>%</th>
<th>OSHA PEL mg/m³</th>
<th>ACGIH TLV mg/m³</th>
<th>NTP</th>
<th>IARC</th>
<th>OSHA regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzoyl Peroxide (94-36-0)</td>
<td>~50</td>
<td>ND</td>
<td>ND</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Dicyclohexyl phthalate (84-61-7)</td>
<td>~50</td>
<td>5</td>
<td>5</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Section 3: Hazard Identification
Emergency overview
Appearance: Solid powder
Immediate effects: Causes skin and eye irritations. Benzoyl Peroxide is an oxidizing material. It can violently decompose at high temperatures.

Potential health effects
Primary Routes of entry: Ingestion, skin and eye contact, inhalation (from generation of vapors or mist).
Signs and Symptoms of Overexposure: ND
Eyes: Contact may cause eye irritation and/or damage.
Skin: Prolonged skin contact may cause skin irritation and redness.
Section 4: First Aid Measures
If accidental overexposure is suspected
Eye(s) Contact: Immediately flush with water for at least 15 minutes. Contact lenses should be removed if the initial flush doesn't wash them out. Get medical attention.
Skin Contact: May cause irritation of the nose, throat, and lungs.
Inhalation: Remove to fresh air. If not breathing, give artificial respiration. Give oxygen if needed. Get medical attention.
Ingestion: Never give anything by mouth to an unconscious person. Do not induce vomiting. Give plenty of water. Get medical attention. Get medical aid immediately.
Note to physician
Treatment: ND
Medical Conditions generally Aggravated by Exposure: ND

Section 5: Fire Fighting Measures
Flash Point: ND
Flammable Limits: ND
Auto-ignition point: 420 °C
Fire Extinguishing Media: Water fog or spray, CO₂, Dry Chemical, Foam.
Special Fire Fighting Procedures: Evacuate area and apply water from a safe distance.
Spray water on the nearby peroxide containers to prevent overheating.
Dot Emergency Guide No: 48
Unusual Fire and Explosion Hazards: Peroxides and decomposition products are flammable and can ignite with explosive force if confined.
Hazardous combustion products: On decomposition, Benzoyl peroxide paste can produce flammable & toxic vapors and PCBs (2,2',4,4' Tetrachlorobiphenyl).
DOT Class: 5.2, Oxidizer.

Section 6: Accidental Release Measures
Steps to be Taken in Case Material is Released or Spilled: Avoid skin contact. Flush with water. Sweep or scoop out and remove. Wet with water and remove with non-sparking tools.
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: Do not store near combustibles. Wash thoroughly after handling. Do not get in eyes, on skin or clothing. Do not breathe dust,
vapor, mist, gas. Keep container closed. Empty container may contain hazardous residues. Keep away from heat (temperatures above 40°C (104°F)), Ignition sources, sparks and open flames. Use explosion proof equipment. Keep away from all sources of heat and ignition such as radiators, steam pipes and direct sunlight. 
Other: For more safety data, see NFPA Bulletin 43B "Storage of Organic Peroxide Formulations". Store in original containers. Select storage areas in accordance with local laws and regulations.
Storage temperature: Maximum 30°C (86°F)
Storage Pressure: NA

Section 8: Exposure Controls / Personal Protection

Engineering Controls
Ventilation required: Sufficient to prevent accumulation of vapors or particulates.

Personal Protection Equipment
Respiratory protection: Use approved type for reducing contaminant concentration in inhaled air.
Protective gloves: Neoprene, nitrile rubber, polyvinyl alcohol gloves.
Skin protection: Chemical-resistant apron or coveralls may be needed.
Eye protection: Eye protection must be worn. Use Splash goggles or Face Shield.
Additional clothing and/or equipment: Safety shower and/or eye wash should be available.

Exposure Guidelines
See Composition/Information on Ingredients (Section2)

Section 9 Physical and Chemical Properties
Appearance and Physical State: Thick, white paste.
Odor (threshold): Slight odor.
Specific Gravity (H₂O=1): 620 kg/M³
Vapor Pressure (mm Hg): ND
Vapor Density (air=1): ND
Percent Volatile by volume: ND
Evaporation Rate (butyl acetate=1):
Boiling Point: ND
Freezing point / melting point: 58 °C
pH: ND
Solubility in Water: Insoluble
Molecular Weight: NA

Section 10: Stability and Reactivity
Stability: Stable under normal conditions.
Conditions to Avoid: Ignition sources, temperatures above 60 °C thermal decomposition contamination.
Materials to Avoid (Incompatibility): Strong acids, strong alkalis, strong oxidizers, reducing agents, sulfur, accelerators and metal salts.
Hazardous Decomposition Products: On decomposition, Benzoyl peroxide paste can
produce flammable and toxic vapors.  
Hazardous Polymerization: May not occur

Section 11: Toxicological Information
Results of component toxicity test performed: Oral Rat: LD$_{50}$ >5000 mg/kg (78% granules).
(Skin) Rabbit: Not irritating 24hr (78% granules). Eye (Rabbit): Slightly to moderately irritating.
Inhalation: Rat LC$_{50}$ 4 hr: 24.3 mg/Kg (78% granules).
Dicyclohexyl phthalate (84-61-7): Oral Rat: LD$_{50}$ >2000 mg/kg. Skin and eye (Rabbit): Not irritating.
Human experience: ND
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: Avoid release to the environment.
Chemical Fate Information: ND

Section 13 Disposal Considerations
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: Organic peroxide type D, solid (contains: Dibenzoyl peroxide)
Hazard Class: 5.2
Packaging group: II
UN Number: UN3106
IATA: Proper shipping name: Organic peroxide type D, solid (contains: Dibenzoyl peroxide)
Hazard Class: 5.2
Packaging group: II
UN Number: UN3106
IMO: Proper shipping name: Organic peroxide type D, solid (contains: Dibenzoyl peroxide)
Class: 5.2
UN Number: UN3106
Packaging group: II
Marine Pollutant: Component: Dibutyl phthalate.
Canadian TDG: Organic peroxide type D, solid (contains: Dibenzoyl peroxide)

Section 15: Regulatory Information
United States Federal Regulations
SARA: 311 and 312: Benzoyl Peroxide (94-36-0); Fire Hazard, Yes. Acute Health Hazard: Yes. Chronic Health Hazard, Yes. Reactive Hazard, Yes. Sudden Release of Pressure Hazard, No.
SARA Title III: Section 313; Benzoyl Peroxide (94-36-0); Listed. Dibutyl phthalate (84-74-2); Listed
RCRA: Dibutyl phthalate (84-74-2). Code: U069
TSCA: All components are on the TSCA Inventory.
CERCLA: Dibutyl phthalate (84-74-2). RQ = 10 lbs.

State Regulations
California Proposition 65: WARNING! This product contains a chemical known to the state of California to cause birth defects or other reproductive harm. Chemical Name: Dibutyl phthalate (87-74-2).

International Regulations
Canada WHMIS: Classification, Benzoyl Peroxide (94-36-0): C, D2B, F. Dibutyl phthalate (84-74-2): D2A
Europe EINECS Numbers: ND

Section 16: Other Information
Label Information: Oxidizer
European Risk and Safety Phrases: ND
European symbols needed: ND
Canadian WHMIS Symbols: ND
Estimated Hazard Rating: Health: 1; Fire: 2; Reactivity: 2 (0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

Abbreviations used in this document
NE= Not established
NA= Not applicable
NIF= No Information Found
ND= No Data

Disclaimer
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