Section 1: Product and Company Identification
Product Name: JB-4 Catalyst, Component of JB-4 Kit 18020
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:

GHS Categories:
Explosives Division 1.3
Oxidizing Solid Category 3
Skin Irritant Cat 2, Eye Irritation Cat 2B

Hazard Overview:
Can violently decompose at high temperatures.
Causes skin and eye irritation.
Harmful to fish and other water organisms.
Oxidizing material.

Signal Word: DANGER

Hazard Statements:
H240  Heating may cause an explosion.
H270  May cause or intensify fire; oxidizer.
H315  Causes skin irritation.
H412  Harmful to aquatic life with long lasting effects.

Health Effects:
NFPA Hazard Rating: Health: 1; Fire: 2; Reactivity: 2
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: A chemical safety assessment has not been carried out.
Emergency overview:
Appearance: White free flowing granules.
Immediate effects: Irritation.

Potential health effects
Primary Routes of entry: Skin and eye contact, inhalation.
Signs and Symptoms of Overexposure: ND
Eyes: Causes eye irritation.
Skin: Causes skin irritation.
Ingestion: Harmful if swallowed.
Inhalation: Harmful if inhaled.
Chronic Exposure: ND
Chemical Listed As Carcinogen or Potential Carcinogen: No
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>Benzoyl Peroxide (94-36-0) EINECS: 202-327-6</td>
<td>51-60</td>
<td>5</td>
<td>5</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Dicyclohexyl phthalate (84-61-7) EINECS: 201-545-9</td>
<td>51-60</td>
<td>NE</td>
<td>NE</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Section 4: First Aid Measures
If accidental overexposure is suspected
Eye(s) Contact: Immediately flush with water for at least 15 minutes, separating the eyelids with fingers.
Skin Contact: Remove contaminated clothing immediately. Wash affected skin thoroughly with soap and water. Seek medical attention if needed.
Inhalation: Remove to fresh air. If not breathing, give artificial respiration. Get medical attention.
Ingestion: Never give anything by mouth to an unconscious person. Wash out mouth if conscious. Get medical attention.

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: ND
Fire Extinguishing Media: ND
Special Fire Fighting Procedures: ND
Unusual Fire and Explosion Hazards: ND
Hazardous combustion products: ND
Section 6: Accidental Release Measures
Steps to be Taken in Case Material is Released or Spilled: Protect personnel from exposure. Remove ignition sources. Sweep up solids.
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:
Storage temperature: 4° C
Storage Pressure: NA

Section 8: Exposure Controls / Personal Protection
Engineering Controls
Ventilation required: Use process enclosures, local exhaust ventilation, or other engineering controls.

Personal Protection Equipment
Respiratory protection: Use process enclosures, local exhaust ventilation, and other engineering controls or fume hood.
Protective gloves: Chemical-resistant gloves should be worn whenever this material is handled. The glove material has to be impermeable and resistant to the product. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves immediately after use. Wash hands with soap and water.
Skin protection: Use appropriate protective clothing.
Eye protection: Eye protection in the form of safety glasses with side shields.
Additional clothing and/or equipment:

Exposure Guidelines
See Composition/Information on Ingredients (Section 3)

Section 9 Physical and Chemical Properties
Appearance and Physical State: White free flowing granules.
Odor (threshold): ND
Specific Gravity (H₂O=1): ND
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: 54° C
pH: ND
Solubility in Water: Insoluble
Molecular Weight: NA

Section 10: Stability and Reactivity
Stability: Stable under recommended storage conditions.
Conditions to Avoid: Heat
Materials to Avoid (Incompatibility): Reactive material; metals.
Hazardous Decomposition Products: Oxides of carbon.
Hazardous Polymerization: Will not occur.

Section 11: Toxicological Information
Results of component toxicity test performed: Benzoyl peroxide (94-36-0): Oral rat LD50: 6400 mg/kg; Irritation eye rabbit: 500 mg/24H, mild. Investigated as a tumorigenic and mutagen. 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: ND
Chemical Fate Information: ND

Section 13 Disposal Considerations
RCRA 40 CFR 261 Classification: None
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 (Dibenzoyl Peroxide 50%)
Hazard Class: 5.2
Packaging group: II
UN Number: UN3106
IATA: Proper shipping name: Organic Peroxide Type D, Solid (Dibenzoyl Peroxide 50%)
Hazard Class: 5.2
Packaging group: II
UN Number: UN3106
Domestic shipments only:
IMO: Proper shipping name: Organic Peroxide Type D, Solid (Dibenzoyl Peroxide 50%)
Class:
UN Number: UN3106
Packaging group: II
Marine Pollutant: No
Canadian TDG: Organic Peroxide Type D, Solid (Dibenzoyl Peroxide 50%)

Section 15: Regulatory Information
United States Federal Regulations
SARA: Benzoyl peroxide (94-36-0) is listed.
SARA Title III: Benzoyl peroxide (94-36-0) is listed.
RCRA: Not listed.
TSCA: All components are listed on the TSCA public inventory.
CERCLA: Substance is not listed.
State Regulations
California Proposition 65: Substance is not listed.
International Regulations
Canada WHMIS: This is a controlled product: C, D2B, F
Europe EINECS Numbers:
Benzoyl Peroxide (94-36-0) EINECS: 202-327-6
Dicyclohexyl phthalate (84-61-7) EINECS: 201-545-9
Section 16: Other Information
Label Information: Oxidizing, Explosive, Irritant, Environment Damaging
European symbols needed: ND
Canadian WHMIS Symbols: C, D2B, F

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