

### Safety Data Sheet

**Product No. 18043 JB-4® Plus Monomer Solution A: Component of 18040 JB-4® Plus Embedding Kit**  
**Issue Date (11-15-13)**  
**Review Date (04-17-15)**

---

#### Section 1: Product and Company Identification

**Product Name: 18043 JB-4® Plus Monomer Solution A: Component of 18040 JB-4® Plus Embedding 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: Hazard Identification

GHS Pictograms:



GHS Categories:

GHS05: Corrosive

GHS07: Irritant

**Signal Word: DANGER**

Causes eye irritation.

May cause allergic skin reaction.

Eye Irritation Category 2B

Skin Sensitizer Category 1B

#### Hazard and Precautionary Statements:

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301A IF SWALLOWED do not induce vomiting. Do not give anything to drink.  
Obtain medical attention without delay.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P305B IF IN EYES: Separate eyelids with finger tips.

- P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P351 Rinse cautiously with water for several minutes.
- P361 Remove/Take off immediately all contaminated clothing.

**Health Effects:**

NFPA Hazard Rating: Health: 2; Fire: 1; Reactivity: 1  
 HMIS® Hazard Rating: Health: 2; Fire: 1; Reactivity: 1  
 (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.

PBT: ND

vPvB: ND

**Emergency overview:**

Appearance: Colorless liquid

Immediate effects: ND

**Potential health effects**

Primary Routes of entry: Skin and eye contact

Signs and Symptoms of Overexposure:

Eyes: Causes serious eye irritation.

Skin: May cause an allergic skin reaction

Ingestion: ND

Inhalation: ND

Chronic Exposure: ND

Chemical Listed As Carcinogen Or Potential Carcinogen: Yes, Formaldehyde (50-00-0), Acetaldehyde (75-07-0), Ethylene Oxide (75-21-8), 1,4-Dioxane (123-91-1)

See Toxicological Information (Section 11)

**Potential environmental effects**

See Ecological Information (Section 12)

**Section 3: Composition / Information on Ingredients**

Principle Hazardous Component(s) (chemical and common name(s)) (Cas. No)	%	OSHA PEL mg/m3	ACGIH TLV mg/m3	NTP Carcinogen	IARC Carcinogen	OSHA regulated Carcinogen
1,4-Dioxane (123-91-1) EINECS: 204-661-8	0-5	TWA 360 mg	TWA 20 ppm 72 mg	Yes	Yes	Yes
2-Hydroxyethyl methacrylate (868-77-9) EINECS: 212-782-2	91-100	NE	NE	No	No	No

4-Methoxyphenol (150-76-5) EINECS: 205-769-8	0-5	TWA Not classified	TWA 5 mg	No	No	No
Acetaldehyde (75-07-0) EINECS: 200-836-8	0-5	TWA Not classified ppm TWA 360 mg	CEILING 25 pp, 45 mg/m <sup>3</sup>	Yes	Yes	Yes
Ethylene oxide (75-21-8) EINECS: 200-849-9	0-5	TWA not classified	TWA 1 ppm 1.8 mg	Yes	Yes	Yes
Formaldehyde (50-00-0) EINECS: 200-001-8	0-5	TWA not classified STEL 2/15 mi ppm	CEILING 0.3 c ppm 0.37 mg/mg <sup>3</sup>	Yes	Yes	Yes
Poly(ethylene oxide) (25322-68-3)	6-10	NE	NE	No	No	No

---

#### Section 4: First Aid Measures

##### If accidental overexposure is suspected

Eye(s) Contact: Flush eyes with flowing water for at least 15 minutes. Separate eyelids with finger tips.

Skin Contact: Wash skin with deluge of water for at least 15 minutes. Remove contaminated clothing.

Inhalation: If breathing is difficult, contact emergency personnel. Remove to fresh air.

Ingestion: If swallowed, wash out mouth with water if person is conscious.

##### Note to physician

Treatment: ND

Medical Conditions generally Aggravated by Exposure: ND

---

#### Section 5: Fire Fighting Measures

Flash Point: 214°F

Flammable Limits: ND

Auto-ignition point: ND

Fire Extinguishing Media: Carbon dioxide, dry chemical powder, and alcohol resistant foam.

Special Fire Fighting Procedures: Firefighters must wear self-contained breathing apparatus and fully protective equipment.

Unusual Fire and Explosion Hazards: ND

Hazardous combustion products: Carbon oxides

DOT Class: Not regulated.

---

#### Section 6: Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled: Any information listed below is to be considered in addition to internal guidelines for isolation of spill, containment of spill, removal of ignition sources from immediate area, and collection for disposal of spill by trained, properly protected clean up personnel. Protect personnel from exposure.

Remove ignition sources. Use appropriate personal protective equipment.  
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: Room Temperature

Storage Pressure: ND

---

### **Section 8: Exposure Controls / Personal Protection**

#### **Engineering Controls**

Ventilation required:

#### **Personal Protection Equipment**

Respiratory protection: ND

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. All glove recommendations presume that the risk of exposure is through splash and not intentional immersion of the hands into the product. Since glove permeation data does not exist for this material, no recommendation for the glove material can be given for the product. Permeation data must be obtained from the glove manufacturer to determine if the glove is suitable for the task.

Eye protection: Use chemical splash goggles and face shield.

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: Colorless liquid

Odor (threshold): ND

Specific Gravity (H<sub>2</sub>O=1): 1.07

Vapor Pressure (mm Hg): ND

Vapor Density (air=1): ND

Percent Volatile by volume: ND

Evaporation Rate (butyl acetate=1): ND

Boiling Point: ND

Freezing point / melting point: ND

pH: ND

Solubility in Water: slightly soluble

Molecular Weight: ND

---

### **Section 10: Stability and Reactivity**

Stability: Stable under normal conditions.

Conditions to Avoid: high temperatures, light

Materials to Avoid (Incompatibility): Polymerizing agents  
Hazardous Decomposition Products: carbon oxides  
Hazardous Polymerization: Will not occur.

---

### **Section 11: Toxicological Information**

Results of component toxicity test performed: ND

Human experience: ND

This product **does** contain any compounds listed by NTP or IARC or regulated by OSHA as a carcinogen. Formaldehyde (50-00-0), Acetaldehyde (75-07-0), Ethylene Oxide (75-21-8), 1,4-Dioxane (123-91-1)

---

### **Section 12: Ecological Information**

Ecological Information: ND

Chemical Fate Information: ND

---

### **Section 13 Disposal Considerations**

RCRA 40 CFR 261 Classification:

Cas#	Waste Code	Regulated Name
50-00-0	U122	Formaldehyde
75-07-0	U001	Ethanol
75-21-8	U115	Oxirane
123-91-1	U108	1,4-Dioxane
150-76-5	not listed	not listed
868-77-9	not listed	not listed
25322-68-3	not listed	not listed

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

Marine Pollutant: No

Canadian TDG: Not regulated

---

### **Section 15: Regulatory Information**

#### **United States Federal Regulations**

MSDS complies with OSHA's Hazard Communication Rule 29, CFR 1910.1200.

SARA: Substance is listed.

SARA Title III: Toxic chemicals, including their de minimis concentrations for which reporting is required under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA), also referred to as the Toxic Release Inventory (TRI):

Formaldehyde (50-00-0): 0.1. Acetaldehyde (75-07-0): 0.1. Ethylene Oxide (75-21-8):

0.1. 1,4-Dioxane (123-91-1): 0.1. Hazardous substances regulated under Section 302 with their TPQs (in pounds): Formaldehyde (50-00-0): TPQ = 500 lbs, EHS-RQ = 100 lbs.

Ethylene oxide (75-21-8): TPQ = 1000 lbs, EHS-RQ = 10.

RCRA: Formaldehyde (50-00-0): U122. Acetaldehyde (75-07-0): U001. Ethylene Oxide

(75-21-8): U115. 1,4-Dioxane (123-91-1): U108.

TSCA: All components are listed.

CERCLA: Formaldehyde (50-00-0): RQ = 100 lbs (45.4 kg). Acetaldehyde (75-07-0): RQ = 1000 lbs (45.4 kg). Ethylene Oxide (75-21-8): RQ = 10 lbs (4.54 kg). 1,4-Dioxane (123-91-1): RQ = 100 lbs (45.4 kg).

### **State Regulations**

California Proposition 65: Materials contained in this product are known to the State of California to cause cancer and/or reproductive toxicity: Formaldehyde (50-00-0): Cancer. Acetaldehyde (75-07-0): Cancer. Ethylene Oxide (75-21-8): Cancer and reproductive toxicity. 1,4-Dioxane (123-91-1): Cancer.

### **International Regulations**

Canada WHMIS: ND

Europe EINECS Numbers: 1,4-Dioxane (123-91-1) EINECS#: 204-661-8. 2-Hydroxyethyl Methacrylate (868-77-9) EINECS#: 212-782-2. 4-Methoxyphenol (150-76-5) EINECS#: 205-769-8. Acetaldehyde (75-07-0) EINECS#: 200-836-8. Ethylene oxide (75-21-8) EINECS#: 200-849-9. Formaldehyde (50-00-0) EINECS#: 200-001-8.

---

### **Section 16: Other Information**

Label Information: Irritant, Corrosive Metal

European Risk and Safety Phrases: R36 - Irritating to eyes. R43 - May cause sensitization by skin contact. S0 - No S Phrase applies. Use ambient temperature storage and normal chemical controls. S7/9 - Keep container tightly closed and in a well-ventilated place. S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

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.