



Material Safety Data Sheet

Product No. 18024 JB-4 Solution B, Component of JB-4 Kit 18020

Issue Date (02-10-09)

Review Date (06-01-12)

Section 1: Product and Company Identification

Product Name: JB-4 Solution B

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

Principle Hazardous Component(s) (chemical and common name(s)) (Cas. No)	%	OSHA PEL mg/m3	ACGIH TLV mg/m3	NTP	IARC	OSHA regulated
Poly(ethylene oxide) * (25322-68-3)	94	NE	NE	NE	NE	NE
N,N-Dimethylbenzeneamine (121-69-7)	6	25 5 PPM	25 5 PPM	NIF	3	NIF
1,4-Dioxane (123-91-1)	0.001	100 PPM	20 PPM	No	2B	ND
Acetaldehyde (75-07-0)	0.001	360 200 PPM	25 PPM Ceiling	P	2B	NIF
Ethylene oxide (75-21-8)	0.001	NE	1.8	K	1	Z
Formaldehyde (50-00-0)	0.001	0.75 PPM	0.3 PPM	P	2A	Z

IARC: 1–The chemical is carcinogenic to humans; 2A–The chemical is probably carcinogenic to humans; 2B–The chemical is possibly carcinogenic

NTP: K–The chemical is known to be carcinogenic; P–The chemical may reasonably be anticipated to be carcinogenic.

OSHA: Z–The chemical appears at 29 CFR part 1910 Subpart Z.

***Airborne Exposure Limits:** AIHA Workplace Environmental Exposure Level (WEEL):

Polypropylene glycols (25322-68-3): 8-hour TWA: 10 mg/m³, as an aerosol

Section 3: Hazard Identification

Emergency overview

Appearance: Colorless liquid

Immediate effects: NIF

Potential health effects

Primary Routes of entry: Ingestion, inhalation, and skin absorption.

Signs and Symptoms of Overexposure: NIF

Eyes: Causes eye irritation.

Skin: Causes skin irritation. Harmful if absorbed through skin. May cause allergic skin reaction.

Ingestion: Harmful if ingested.

Inhalation: Harmful if inhaled.

Chronic Exposure: NIF

Chemical Listed As Carcinogen Or Potential Carcinogen: See Section 2; 1,4-Dioxane (123-91-1), Acetaldehyde (75-07-0), Ethylene oxide (75-21-8), Formaldehyde (50-00-0)
See Toxicological Information (Section 11)

Potential environmental effects

See Ecological Information (Section 12)

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.

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: NIF

Medical Conditions generally Aggravated by Exposure: NIF

Section 5: Fire Fighting Measures

Flash Point: > 200 ° F

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

DOT Class: Not regulated

Section 6: Accidental Release Measures

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.

Steps to be Taken in Case Material is Released or Spilled: Absorb liquids on absorbent material. Contain spilled liquids. Protect personnel from exposure. Remove ignition sources. Use appropriate personal protective equipment. Ventilate the area.

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: Use process enclosures, local exhaust ventilation, or other engineering controls.

Storage temperature: Store at room temperature.

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 fume hood.

Protective gloves: Use gloves

Skin protection: Use gloves and appropriate clothing

Eye protection: The use of eye protection in the form of safety glasses with side shields.

Additional clothing and/or equipment: NIF

Exposure Guidelines

See Composition/Information on Ingredients (Section2)

Section 9 Physical and Chemical Properties

Appearance and Physical State: Colorless liquid.

Odor (threshold): ND

Specific Gravity (H₂O=1): 1.12

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: Complete

Molecular Weight: NA

Section 10: Stability and Reactivity

Stability: Stable

Conditions to Avoid: Heat, open flame.

Materials to Avoid (Incompatibility):

Hazardous Decomposition Products: Oxidizing agents, acids, acid chlorides.

Hazardous Polymerization: Will not occur.

Section 11: Toxicological Information

Results of component toxicity test performed: ND

Human experience: ND

This product **does** contain compounds listed by NTP or IARC or regulated by OSHA as a carcinogen. See Section 2

Section 12: Ecological Information

Ecological Information: ND

Chemical Fate Information: ND

Section 13 Disposal Considerations

RCRA 40 CFR 261 Classification: The following lists the status of the chemical and its components in reference to 40 CFR Part 261.33. If the product is listed by code number the substance may be subject to special federal and state disposal regulations. If no codes are listed the material must be disposed in compliance with all Federal, State and Local Regulations. Formaldehyde (50-00-0); U122, Acetaldehyde (75-07-0); U001, Ethylene oxide (75-21-8); U115,

N,N-Dimethylbenzeneamine (121-69-7); Not listed, 1,4-Dioxane (123-91-1); U108, Poly(ethylene oxide) (25322-68-3); 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

IMO: Proper shipping name: Not regulated

Marine Pollutant: No

Canadian TDG: ND

Section 15: Regulatory Information**United States Federal Regulations**

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

SARA: Extremely Hazardous Substances and TPQs This list includes hazardous chemicals as defined in 29 CFR 1910.1200(c); and extremely hazardous substances regulated under Section 302 of SARA Title III with their TPQs (in pounds), as listed in 40 CFR 355, Appendices A and B.

Poly(ethylene oxide) (25322-68-3): Not listed

N,N-Dimethylbenzeneamine (121-69-7): Not listed

1,4-Dioxane (123-91-1): Not listed

Acetaldehyde (75-07-0): Not listed

Ethylene oxide (75-21-8): 1000 TPQ (pounds) 10 EHS-RQ(pounds)

Formaldehyde (50-00-0): 500 TPQ (pounds) 100 EHS-RQ(pounds)

SARA Title III: Section 313: This list identifies the toxic chemicals, including their de minimis concentrations for which reporting are required under Section 313 of the

Emergency Planning and Community Right-to-Know Act (EPCRA). The list is also referred to as the Toxics Release Inventory (TRI) List.

Poly(ethylene oxide) (25322-68-3): Not listed.

N,N-Dimethylbenzeneamine (121-69-7), de minimis %: 1.0, TRI: not listed.

1,4-Dioxane (123-91-1), de minimis %: 0.1, TRI: not listed.

Acetaldehyde (75-07-0), de minimis %: 0.1, TRI: not listed.

Ethylene oxide (75-21-8), de minimis %: 0.1, TRI: not listed.

Formaldehyde (50-00-0), de minimis %: 0.1, TRI: not listed.

RCRA: See Section 13.

TSCA: All components of this product are on the TSCA public inventory.

CERCLA: The hazardous substances, and their reportable quantities (RQ's) are listed in the federal regulations at 40 CFR Part 302, Table 302.4. Release of a CERCLA hazardous substance in an amount equal to or greater than its RQ, in any 24-hour period, must be reported to the National Response Center.

Poly(ethylene oxide) (25322-68-3): Not listed.

N,N-Dimethylbenzeneamine (121-69-7): Not listed.

1,4-Dioxane (123-91-1): Not listed.

Acetaldehyde (75-07-0): RQ: 1000 lbs (454 Kg)

Ethylene oxide (75-21-8): RQ: 10 lbs (4.54 Kg)

Formaldehyde (50-00-0): RQ: 100 lbs (45.4 Kg)

State Regulations

California Proposition 65: The following components listed are known to the State of California to cause cancer or reproductive harm: Formaldehyde (50-00-0), Acetaldehyde (75-07-0), Ethylene oxide (75-21-8), 1,4-Dioxane (123-91-1).

International Regulations

Canada WHMIS: ND

Europe EINECS Numbers: ND

Section 16: Other Information

Label Information: Causes skin irritation. Skin sensitizer. Harmful if absorbed through skin. Harmful if ingested or inhaled

European Risk and Safety Phrases: ND

European symbols needed: ND

Canadian WHMIS Symbols: ND

Hazard Rating: Health: **2**; Flammability: **1**; Reactivity: **0**

0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

These ratings are assessments of the properties of the material using the ANSI/NFPA 704 Standard. Additional information can be found by consulting in the NFPA published ratings lists (List 325 and List 49).

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.

MSDS Form 0013F1 V2