TED PELLA, INC.
Microscopy Products for Science and Industry

Safety Data Sheet
Product No. 18024 JB-4 Solution B, Component of JB-4 Kit 18020
Issue Date (11-15-13)
Review Date (08-31-17)

Section 1: Product and Company Identification

Product Name: JB-4 Solution B, Component of JB-4 Kit
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:


Irritant Health hazard

GHS Categories:
GHS07: Irritant
GHS08: Health Hazard
Hazard Overview:
Causes skin and eye irritation.
Harmful if absorbed through skin.
Harmful if inhaled.
May cause allergic skin reaction.

GHS Classification:
Acute Toxicity Inhalation Category 5
Skin Irritant Cat 2, Eye Irritation Cat 2B
Skin Irritant Category 2
Skin Sensitizer Category 1B

Signal Word: DANGER
Hazard Statements:
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.
Precautionary Statements:

P285	In case of inadequate ventilation wear respiratory 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: 0
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.
PBT: ND
vPvB: ND

Emergency overview:
Appearance: Colorless liquid
Immediate effects: ND

Potential health effects
Primary Routes of entry: Eye and skin contact, inhalation.
Signs and Symptoms of Overexposure: ND
Eyes: Causes eye irritation.
Skin: Harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction.
Ingestion: Harmful if swallowed.
Inhalation: Harmful if inhaled.
Chronic Exposure: ND
Chemical Listed As Carcinogen or Potential Carcinogen: Yes
See Toxicological Information (Section11)

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
Poly(ethylene oxide) (25322-68-3)	91-100	NE	NE	No	No	No
Benzenamine, N, N-dimethyl (121-69-7)	6-10	25 mg	5 ppm 25 mg STEL	No	3	No

EINECS: 204-493-5			10 ppm 10 mg/m3			
Acetaldehyde (75-07-0) EINECS: 200-836-8	0-5	360 mg	CEILING 25 ppm 45 mg/m3	P	2B	No
1, 4-Dioxane (123-91-1) EINECS: 204-661-8	0-5	360 mg	20 ppm 72 mg	No	2B	No
Ethylene oxide (75-21-8) EINECS: 200-849-9	0-5	NE	1 ppm 1.8 mg	K	1	Z
Formaldehyde (50-00-0) EINECS: 200-001-8	0-5	STEL 2/15 mi ppm	CEILING 0.3 c ppm 0.37 mg/m3	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

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Section 4: First Aid Measures
If accidental overexposure is suspected
Eye(s) Contact: Separate eyelids with finger tips. Flush eyes with flowing water for at least 15 minutes.
Skin Contact: Remove contaminated clothing. Wash skin with deluge of water for at least 15 minutes. Wash with plenty of soap and water.
Inhalation: Remove to fresh air. If breathing is difficult, contact emergency personnel.
Ingestion: If swallowed, wash out mouth with water if person is conscious. Do not induce vomiting. Do not give anything to drink. Obtain medical attention without delay.
Note to physician
Treatment: ND
Medical Conditions generally Aggravated by Exposure: ND

Section 5: Fire Fighting Measures
Flash Point: > 200
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
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. See Section 13.

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: Room Temperature.
Storage Pressure: ND

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: 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 body/skin protective clothing.
Eye protection: Use 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: Colorless liquid
Odor (threshold): ND
Specific Gravity (H_2O=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: ND

Section 10: Stability and Reactivity
Stability: Stable under recommended storage conditions.
Conditions to Avoid: Heat and open flame.
Materials to Avoid (Incompatibility): Oxidizing agents, acids, acid chlorides.
Hazardous Decomposition Products: ND
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. See Section 2.

Section 12: Ecological Information
Ecological Information: ND
Chemical Fate Information: ND

Section 13 Disposal Considerations
RCRA 40 CFR 261 Classification:
1, 4-Dioxane (123-91-1) Waste Code: U108
Acetaldehyde (75-07-0) Waste Code: U001
Benzenamine, N, N-dimethyl (121-69-7) Waste Code: Not listed.
Ethylene oxide (75-21-8) Waste Code: U115
Formaldehyde (50-00-0) Waste Code: U122
Poly (ethylene oxide) (25322-68-3) Waste Code: 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:
Ethylene oxide (75-21-8) is listed: 1000 TPQ (pounds) 10 EHS-RQ (pounds)
Formaldehyde (50-00-0) is listed: 500 TPQ (pounds) 100 EHS-RQ (pounds)
SARA Title III:
N,N-Dimethyl benzenamine (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:
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)
Benzenamine, N-dimethyl (121-69-7): RQ: 100 lbs.
1, 4-Dioxane (123-91-1): RQ: 100 lbs.
State Regulations
California Proposition 65: List below identifies those items which are known to the State of California to cause cancer.
Known to State of California to cause reproductive toxicity*.
Formaldehyde (50-00-0) is listed.
Acetaldehyde (75-07-0) is listed.
*Ethylene oxide (75-21-8) is listed.
1, 4-Dioxane (123-91-1) is listed.
International Regulations
Canada WHMIS: ND
Europe EINECS Numbers:
1, 4-Dioxane (123-91-1) EINECS: 204-661-8
Acetaldehyde (75-07-0) EINECS: 200-836-8
Benzenamine, N, N-dimethyl (121-69-7) EINECS: 204-493-5
Ethylene oxide (75-21-8) EINECS: 200-849-9

Formaldehyde (50-00-0) EINECS: 200-001-8

Section 16: Other Information

Label Information: Irritant, Health Hazard
European Risk and Safety Phrases: ND
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