MATERIAL SAFETY DATA SHEET



Date Issued: 12/05/2006 MSDS No: RF-5124 RELEASE FILM Date-Revised: 04/28/2009 Revision No: 1

RF-5124 RELEASE FILM

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: RF-5124 RELEASE FILM **GENERAL USE:** Release agent **CHEMICAL FAMILY:** Vinyl chloride, vinyl acetate copolymer solution

MANUFACTURER

24 HR. EMERGENCY TELEPHONE NUMBERS

BJB Enterprises, Inc. 14791 Franklin Avenue Tustin, CA 92780 **Customer Service Number:** (714) 734-8450 **Fax:** (714) 734-8929 CHEMTREC (US Transportation): (800) 424-9300 or (703) 527-3887

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE AND ODOR: Green liquid with a solvent odor.

IMMEDIATE CONCERNS: DANGER! EXTREMELY FLAMMABLE LIQUID AND VAPOR. Vapor may cause flash fire. Harmful or fatal if swallowed. Harmful if inhaled or absorbed through skin. Affects central nervous system. Causes irritation to skin, eyes, and respiratory tract.

POTENTIAL HEALTH EFFECTS

EYES: Vapors are irritating to the eyes. Splashes can produce painful irritation and eye damage.

SKIN: Causes irritation to skin. Symptoms include redness, itching, and pain.

INGESTION: May produce abdominal pain, nausea. Aspiration into lungs can produce severe lung damage and is a medical emergency.

INHALATION: Causes irritation to the nose and throat. Concentrations above recommended exposure levels may cause headache, dizziness, nausea, shortness of breath, and vomiting. Higher concentrations may cause central nervous system depression and unconsciousness.

MEDICAL CONDITIONS AGGRAVATED: Persons with pre-existing skin disorders or eye problems or impaired respiratory function may be more susceptible to the effects of the substance.

ROUTES OF ENTRY: Eye and skin contact, inhalation of vapors, or accidental ingestion.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
2-butanone	80 - 90	78-93-3
Acetic acid ethenyl ester, polymer with chloroethene	5 - 10	9003-22-9
Xylene	1 - 5	1330-20-7
Ethylbenzene	1 - 5	100-41-4
Acetone	< 0.15	67-64-1

4. FIRST AID MEASURES

- **EYES:** Immediately rinse with water. Remove contact lenses. Hold eyelids apart and flush eyes with water for at least 15 minutes. Get immediate medical attention.
- **SKIN:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Thoroughly wash or discard clothing and shoes before reuse.
- **INGESTION:** Aspiration hazard. If swallowed, vomiting may occur spontaneously, but DO NOT INDUCE. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- **INHALATION:** Remove patient from exposure, keep warm and at rest. Obtain immediate medical attention. Treatment is symptomatic for primary irritation or bronchospasm. If breathing is labored, oxygen should be administered by qualified personnel. Apply artificial respiration if breathing has ceased or shows signs of failing.
- **NOTES TO PHYSICIAN:** Symptomatic and supportive therapy as needed. Following severe exposure medical follow-up should be monitored for at least 48 hours.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: -9°C (16°F) Closed Cup

- **EXTINGUISHING MEDIA:** Dry chemical, foam or carbon dioxide. Water spray may be used to keep fire exposed containers cool, dilute spills to nonflammable mixtures, protect personnel attempting to stop leak and disperse vapors.
- **EXPLOSION HAZARDS:** Temperatures at or above the flash point could generate combustible mixtures. Avoid all ignition sources. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of.
- **FIRE FIGHTING PROCEDURES:** Cool fire exposed containers with water spray. Remove containers from the fire area if possible. Do not release runoff from fire control methods to sewers or waterways.
- **FIRE FIGHTING EQUIPMENT:** Firefighters should wear positive pressure self-contained breathing apparatus (SCBA) and consider use of unmanned hose holders or monitor nozzles for fighting large fires.
- SENSITIVE TO STATIC DISCHARGE: This material can accumulate static charges which can cause an incendiary electrical discharge.

6. ACCIDENTAL RELEASE MEASURES

- **SMALL SPILL: Eliminate sources of ignition.** Evacuate the area. Clean-up should only be performed by trained personnel. People dealing with a major spill should wear full protective clothing including appropriate respiratory protection. Prevent product spill from entering sewers or waterways. Neutralize small spills with a decontaminant.
- LARGE SPILL: Contain and absorb large spills onto an inert, non-flammable adsorbent carrier (earth or sand). Do not use combustible materials such as saw dust. Use only spark resistant and explosion proof recovery devices. Shovel into open-top drums or plastic bags for further decontamination, if necessary. Wash the spill area clean with a liquid decontaminant. Remove and properly dispose of residues. Notify applicable government authorities if release is reportable. (See CERCLA in Section 15).
- **RELEASE NOTES:** US regulations require reporting spills of this material that could reach any surface waters. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Flammable liquid. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Avoid breathing vapor over open containers. Avoid open container exposure to damp air. Avoid breathing aerosols, mists, and

vapors.

- HANDLING: Use with sufficient ventilation to keep employee exposure below recommended limits. Provide adequate ventilation for storage, handling and use, especially for enclosed or low spaces. Avoid contact of liquid with eyes and prolonged skin exposure. Do not allow product to contact open flame or electrical heating elements because dangerous decomposition products may form.
- **STORAGE:** Store in a cool, dry place, away from excessive heat, in original or similar container. Avoid unnecessary contact. Protect from freezing. Containers should be tightly sealed to prevent contamination with foreign materials.

SHELF LIFE: 6 months from date of shipment under manufacturers recommended storage conditions.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS					
	-	OSHA PEL ACGIH TLV		SupplierOEL			
Chemical Name		ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
2-butanone	TWA	200	590	200	590	NE	NE
	STEL	NE	NE	300	885	NE	NE
Acetic acid ethenyl ester, polymer with chloroethene	TWA	NE	NE	NE	NE	NE	NE
	STEL	NE	NE	NE	NE	NE	NE
	TWA	100	435	100	434	NE	NE
Xylene	STEL	NE	NE	150	885 NE NE NE NE NE 434 NE 651 NE 434 100 ^[1] 543 125 ^[1]	NE	NE
F.(. 1)	TWA	100	435	100	434	100 [1]	435 [1]
Ethylbenzene	STEL	NE	NE	125	543	125 [1]	545 [1]
Acetone	TWA	1000	2400	500	NE	NE	NE
	STEL	NE	NE	750	NE	NE	NE
OSHA TABLE COMMENTS: 1. NIOSH REL						-	

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ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

- EYES AND FACE: Safety goggles or glasses are recommended. Plastic face shields should be used for complete face protection to protect against possible splashing or spraying of material. ANSI Z87.1 or approved equivalent.
- SKIN: Chemical-resistant gloves and chemical goggles, face-shield, and synthetic apron or coveralls should be used to prevent contact with eyes, skin, or clothing. Wear nitrile or neoprene gloves. Chemical resistant gloves lined with polyethylene offer maximum protection.
- RESPIRATORY: Exhaust ventilation recommended. An organic vapor cartridge or fresh air supplied respirator (NIOSH approved) may be necessary for certain applications. Consider the type of application, environmental concentrations, and other materials being used concurrently when determining respirator use and selection. Observe OSHA regulations for respirator use (29 CFR 1910.134).
- PROTECTIVE CLOTHING: Protective clothing should be selected and used in accordance with 'Guidelines for the Selection of Chemical Protective Clothing' published by ACGIH.
- WORK HYGIENIC PRACTICES: Contaminated clothing should be changed and washed before reuse. Eating, drinking and smoking in immediate work area should be prohibited. Wash hands before eating.

OTHER USE PRECAUTIONS: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Training is important. Follow all label precautions.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid ODOR: Solvent COLOR: Green pH: Not Available PERCENT VOLATILE: 90.7 VAPOR PRESSURE: 78 mmHg at 20°C (68°F) VAPOR DENSITY: Heavier than air BOILING POINT: 79°C (175°F) FLASHPOINT AND METHOD: -9°C (16°F) Closed Cup SOLUBILITY IN WATER: Moderate

SPECIFIC GRAVITY: 0.840 (water=1) at 25°C (77°F)

VISCOSITY: 21 Centipoise at 25°C (77°F)

VOC (Volatile Organic Compound): 761.900 g/l Calculated. Theoretical VOC minus water and exempt solvents.

10. STABILITY AND REACTIVITY

STABILITY: This product is stable under normal ambient conditions of temperature and pressure.

POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Heat, flames, and ignition sources.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and carbon dioxide.

INCOMPATIBLE MATERIALS: Oxidizing materials, caustics, amines, ammonia, strong bases, chloroform, chlorosulfonic acid, oleum, potassium t-butoxide, hydrogen peroxide, nitric acid. Can attack many plastics, resins and rubber.

11. TOXICOLOGICAL INFORMATION

TOXICITY TO ANIMALS

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
2-butanone	2737 mg/kg	6480 mg/kg	23500 mg/m3 (8 h)
Acetic acid ethenyl ester, polymer with chloroethene	Not Established	Not Established	Not Established
Xylene	4300 mg/kg	14100 uL/kg	4550 ppm (4 h)
Ethylbenzene	3500 mg/kg	17800 uL/kg	Not Established
Acetone	Not Established	Not Established	Not Established

Chemical Name	IARC Status
Acetic acid ethenyl ester, polymer with chloroethene	3
Ethylbenzene	2B

IARC: This product contains substances that are classified as possible carcinogens to humans.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: No specific ecological data are available for this product. Refer to Section 6 for information regarding accidental release and Section 15 for regulatory reporting information.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: The generation of waste should be avoided or minimized wherever possible. Disposal should be in accordance with local, state, provincial or national regulations.

EMPTY CONTAINER: Containers must be emptied (as defined by RCRA, 40 CFR Section 261.7 or state regulations that may be more stringent) and either passed to an approved recycler or destroyed.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION) LAND

PROPER SHIPPING NAME: Flammable liquid, n.o.s.

TECHNICAL NAME: 2-butanone, xylene, vinyl chloride blend

PRIMARY HAZARD CLASS/DIVISION: 3

UN/NA NUMBER: UN 1993

PACKING GROUP: II

ERG CODE: 128

LABEL: Flammable

AIR (ICAO/IATA)

SHIPPING NAME: Flammable liquid, n.o.s.

TECHNICAL NAME: 2-butanone, xylene, vinyl chloride blend

UN/NA NUMBER: UN 1993

PRIMARY HAZARD CLASS/DIVISION: 3

PACKING GROUP: II

LABEL: Flammable

VESSEL (IMO/IMDG)

SHIPPING NAME: Flammable liquid, n.o.s.

TECHNICAL NAME: 2-butanone, xylene, vinyl chloride blend

UN/NA NUMBER: UN 1993

PRIMARY HAZARD CLASS/DIVISION: 3

PACKING GROUP: II

LIMITED QUANTITY: 1 liter

LABEL: Flammable

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Acute health hazard. Chronic health hazard

313 REPORTABLE INGREDIENTS: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt.%	CAS
Xylene	1 - 5	1330-20-7
Ethylbenzene	1 - 5	100-41-4

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: For this/these chemicals, release of more than the Reportable Quantity to the environment in a 24-hour period requires notification to the National Response Center (800-424-8802 or 202-426-2675).

Chemical Name	Wt.%	CERCLA RQ
2-butanone	80 - 90	5,000
Xylene	1 - 5	100 lbs.
Ethylbenzene	1 - 5	1,000
Acetone	< 0.15	5,000

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA STATUS: This product or its components are listed in or exempt from the TSCA inventory requirements.

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

29 CFR1910.119---PROCESS SAFETY MANAGEMENT OF HIGHLY HAZARDOUS CHEMICALS: None of the chemicals in this product are considered highly hazardous by OSHA.

REGULATIONS

STATE REGULATIONS: California Proposition 65: This product contains chemical(s) which are known to the State of California to cause cancer, birth defects or other reproductive harm, and may be subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):

CALIFORNIA PROPOSITION 65

Chemical Name	Wt.%	Listed
Ethylbenzene	1 - 5	Cancer

OSHA HAZARD COMM. RULE: The contents of the MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

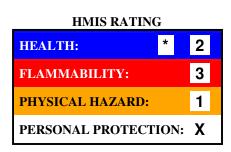
16. OTHER INFORMATION

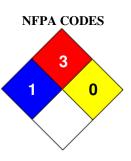
REASON FOR ISSUE: Revision

APPROVED BY: Michael Rose TITLE: R & D Manager

PREPARED BY: Gus Alidad

REVISION SUMMARY: Revision 1: Sections 2, 3, 8, 9, 10, 11, 15, and 16.





HMIS RATINGS NOTES: Personal Protection: See Section 8

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