



Product Name: EMPAC™ 1007, 1007-20, 1007-15, 1007-10, 1007-5, 1007-3

Date of Preparation: 07/13/07

Replaces Version Dated: 07/06/07

## MATERIAL SAFETY DATA SHEET

Prepared in accordance with OSHA1910.1200 and ANSI Z400.1

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME: EMPAC™ 1007, 1007-20, 1007-15, 1007-10, 1007-5, 1007-3**

**MANUFACTURER:** Crosslink  
**ADDRESS:** 950 Bolger CT  
St. Louis, MO 63026  
USA

**Phone:** (636) 349-0050 **Fax:** (636) 349-0003

**Website:** [www.crosslinkusa.com](http://www.crosslinkusa.com)

**24-Hour Emergency Phone Number: CHEMTREC at 1-800-424-9300**

### 2. HAZARDS IDENTIFICATION

Liquid with a solvent odor.

**EMERGENCY OVERVIEW:** Flammable liquid and vapor. May cause severe eye irritation. May cause skin and respiratory irritation. May cause headache, dizziness, nausea and other symptoms of central nervous system depression. May be absorbed through the skin. Prolonged overexposure may damage the nervous system, hearing, blood and blood forming organs, kidneys and liver.

**US OSHA Hazard Classification:** Flammable, Irritant, Target Organ Effects, Carcinogen

**EU Preparation Classification (1999/45/EC):** Harmful (Xn) R10, R20/21/22, R36/38

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS# / EINECS#	%	EU Classification (67/548/EEC)
Xylene	1330-20-7/215-535-7	35-50	Xn R10, R20/21, R38
Ethyl benzene	100-41-4/202-849-4	1-15	F, Xn R11, R20
2-Butoxyethanol	111-76-2/203-905-0	30-55	Xn, Xi R20/21/22, R36/38
Polymer	Proprietary	1-25	Not classified

See Section 16 for further information on EU Classification.

### 4. FIRST AID

**INGESTION:** If the patient is conscious, rinse mouth with water. Aspiration hazard. Do not induce vomiting. Get immediate medical attention. Never give anything by mouth to an unconscious person.

**SKIN CONTACT:** Quickly remove contaminated clothing and wash immediately with plenty of soap and water (15 minutes). Get medical attention. Launder contaminated clothing before reuse.

**EYE CONTACT:** Rinse immediately with plenty of water for 15 minutes, while lifting the eyelids. Get immediate medical attention.

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**INHALATION:** Remove affected person from source of exposure. If not breathing, ensure an open airway and institute cardiopulmonary resuscitation (CPR). If breathing is difficult, have a qualified person administer oxygen if available. Get immediate medical attention.

## 5. FIRE AND EXPLOSION DATA

**BASIC FIREFIGHTING PROCEDURES:** Use foam; dry chemical or carbon dioxide. Do not use direct water stream. Water may be ineffective but water spray should be used to cool fire exposed containers and to flush spills away from sources of ignition. Do not release runoff from fire control methods to sewers or waterways. Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Flammable liquid. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. Vapor-air mixture are explosive within the flammable limits noted above. Static electricity may accumulate and create a fire hazard.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Oxides of carbon and nitrogen and unknown materials.

## 6. ACCIDENTAL RELEASE MEASURES

**Spill:** Remove all ignition sources such as open flames, spark producing equipment, pilot lights, etc. Wear appropriate protective clothing to prevent eye and skin contact including impervious gloves, safety goggles and respirator if needed. Ventilate area. Cover with and inert absorbent material and collect into an appropriate container for disposal. Report spills and releases as required to appropriate authorities.

## 7. HANDLING AND STORAGE

**HANDLING:** Avoid breathing vapors, aerosols and mists. Use only with adequate ventilation. Avoid contact with the eyes, skin and clothing. Always wear impervious gloves, chemical safety goggles and protective clothing when handling this material. Wash thoroughly after handling. Do not eat, drink or smoke in the work area. Keep product away from heat, sparks, flames and all other sources of ignition. No smoking in storage or use areas. Keep containers closed when not in use.

**STORAGE:** Keep container tightly closed. Store in cool, dry, isolated, well-ventilated area away from heat, sources of ignition and incompatibles.

**EMPTY CONTAINERS:** Empty containers may contain product residue and may be dangerous. Follow all MSDS precautions in handling empty containers.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION INFORMATION

### EXPOSURE LIMITS

Chemical Name	Exposure Limits
Xylene	100 ppm TWA (PEL/TLV), 150 ppm STEL (TLV) 50 ppm (8 hr), 100 ppm (short term) skin EU OEL
Ethyl Benzene	100 ppm TWA (PEL/TLV), 125 ppm STEL (TLV) 100 ppm (8 hr), 200 ppm (short term) skin EU OEL
2-Butoxyethanol	20 ppm TWA skin (TLV), 50 ppm TWA skin (PEL) 10 ppm TWA skin DFG MAK 25 ppm TWA, 50 ppm STEL UK WEL
Polymer	None Established (PEL/TLV)

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**ENGINEERING CONTROLS:** Use with adequate general or local exhaust ventilation to minimize exposure levels. Use explosion proof electrical equipment and wiring where required.

**EYE PROTECTION:** Chemical safety goggles recommended.

**SKIN PROTECTION:** Avoid skin contact. Impervious gloves such as Viton, Silver Shield™ or 4H™ are recommended.

**RESPIRATORY PROTECTION:** If needed, a NIOSH approved respirator with organic vapor cartridges may be used. For higher exposures (greater than 10 times the exposure limit), a supplied air respirator may be required. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134 and ANSI Z88.2 in the US, local regulations and good Industrial Hygiene practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: 136-169° C

SPECIFIC GRAVITY: ND

MELTING POINT: ND

% VOLATILE: >50%

VAPOR PRESSURE: 8 mmHg @ 20 C (xylene)

EVAPORATION RATE (BUTYL ACETATE = 1): 0.7 (xylene)

VAPOR DENSITY (AIR = 1): 4.1 (2-butoxyethanol)

SOLUBILITY IN WATER: Xylene and the polymer are insoluble, 2-butoxyethanol is soluble

OCTANOL/WATER PARTITION COEFFICIENT: ND

pH: ND

APPEARANCE/ODOR: Liquid with a solvent odor.

FLASH POINT: 77° F (25° C) (xylene)

AUTOIGNITION TEMPERATURE: 464° C (xylene) 244° C (2-butoxyethanol)

FLAMMABLE LIMITS IN AIR (% BY VOL.) LOWER: 1.1% (xylene) UPPER: 10.6% (2-butoxyethanol)

## 10. STABILITY AND REACTIVITY DATA

**STABILITY:** Stable under normal conditions of use and storage.

**INCOMPATIBILITY:** Strong acids, strong bases, oxidizing agents, amines.

**CONDITIONS TO AVOID:** Heat, flames, hot surfaces and all other sources of ignition.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Combustion may produce carbon monoxide, carbon dioxide, oxides of nitrogen and unknown materials.

## 11. TOXICOLOGICAL INFORMATION

### PRODUCT HEALTH HAZARD INFORMATION

**SKIN:** Contact with the liquid may cause irritation of the skin. May be absorbed through the skin to cause effects similar to inhalation and ingestion.

**EYE:** Contact may cause moderate to severe irritation of the eyes with possible corneal injury.

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**INHALATION:** Inhalation of vapors may cause mucous membrane and respiratory irritation with coughing or difficult breathing. High concentrations may cause nausea, vomiting, headache, dizziness, and other symptoms of central nervous system depression along with ringing in the ears and severe breathing difficulties, which may be delayed.

**INGESTION:** May cause irritation of the mouth and gastrointestinal tract with nausea and vomiting. Aspiration into the lungs during ingestion or vomiting may cause lung damage and may be fatal. Ingestion of 2-butoxyethanol may cause damage to the blood, liver and kidneys.

**CHRONIC HEALTH EFFECTS:** Chronic overexposure to the solvents in this product may damage the nervous system, hearing, blood and blood forming organs, kidneys and liver. Ethyl benzene is listed by IARC as a 2B carcinogen (possible carcinogenic to humans). None of the other components of this product are listed as a carcinogen by IARC, NTP, or OSHA.

#### **ACUTE TOXICITY VALUES**

Xylene: Rat oral LD<sub>50</sub> = 4300 mg/kg; Rabbit dermal LD<sub>50</sub> = >1700 mg/kg ; Rat inhalation LC<sub>50</sub> = 5000 ppm/4 hr

Ethyl benzene: Rat oral LD<sub>50</sub> = 5460 mg/kg; Rabbit dermal LD<sub>50</sub> = 17,800 mg/kg

2-Butoxyethanol: Rat oral LD<sub>50</sub> = 470-3000 mg/kg; Rabbit dermal LD<sub>50</sub> = 220-612 mg/kg ; Rat inhalation LC<sub>50</sub> = 450 ppm/4 hr

## **12. ECOLOGICAL INFORMATION**

The ecological effects of this product have not been determined. The solvents in this product are not classified as toxic to aquatic organisms.

## **13. DISPOSAL CONSIDERATIONS**

Dispose in accordance with all local, state and federal regulations.

## **14. TRANSPORTATION REQUIREMENTS**

DOT PROPER SHIPPING NAME: Flammable liquid n.o.s. (Xylene, Ethyl Benzene)

DOT HAZARD CLASS: 3, PG III

UN NUMBER: UN1993

DOT LABELS REQUIRED: Flammable liquid

Note: Container with more than 200 lbs are subject to RQ requirements

IATA PROPER SHIPPING NAME: Flammable liquid, n.o.s. (Xylene, Ethyl Benzene)

IATA HAZARD CLASS: 3, PG III

UN NUMBER: UN1993

IATA LABELS REQUIRED: Flammable liquid

## **15. REGULATORY INFORMATION**

### **SARA TITLE III INFORMATION:**

**Section 311/312 (40 CFR 370) Hazard Categories:** Acute health, chronic health, fire hazard

**Section 313 (40 CFR 372):** This product contains the following chemicals subject to SARA Title III Section 313

Reporting requirements:	Xylene	1330-20-7	35-50%
	Ethyl Benzene	100-41-4	1-15%
	2-Butoxyethanol (glycol ether compound)		30-55%

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**Section 302** (40 CFR 355): This product contains no chemicals listed as extremely hazardous chemicals under SUPERFUND Amendments and Reauthorization Act (SARA).

**CERCLA 103 Reportable Quantity:** 200 lbs (Xylene - 100 lbs)

**EPA TSCA:** All components of this product are listed on the EPA TSCA inventory.

**California Proposition 65:** This product contains ethyl benzene, which is known to the State of California to cause cancer.

**European Community Labeling Classification:**

 Harmful	Contains xylene, ethyl benzene and 2-butoxyethanol R10 Flammable R20/21/22 Harmful by inhalation, in contact with skin and if swallowed. R36/38 Irritating to eyes and skin. S16 Keep away from sources of ignition – No smoking. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37/39: Wear suitable protective clothing, gloves and eye/face protection
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**16. OTHER INFORMATION**

**NFPA Ratings: Health: 2**

**Flammability: 3**

**Reactivity: 0**

**HMIS Ratings: Health: 2\***

**Flammability: 3**

**Reactivity: 0**

REVISION DATE: 07/13/2007  
 Revision Summary: EU Labeling

REPLACES SHEET DATED: 07/06/2007

**EU Classes and Risk Phrases for Reference (See Sections 2 and 3):**

- F Highly Flammable
- Xi Irritant
- Xn Harmful
- R10 Flammable
- R11 Highly Flammable
- R20 Harmful by inhalation.
- R20/21 Harmful by inhalation and in contact with skin.
- R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
- R36/38 Irritating to eyes and skin.
- R38 Irritating to skin.

NOTICE: The information presented herein is based on data considered to be accurate as of the date of preparation of this Material Safety Data Sheet. However, no warranty or representation, express or implied, is made as to the accuracy or completeness of the foregoing data and safety information. It is the responsibility of the user to determine the applicability of this information for his use.