

# SAFETY DATA SHEET



Date Prepared : 08/31/2011  
 SDS No : TC-1614 PART A  
 Date Revised : 07/21/2017  
 Revision No : 3

## TC-1614 PART A

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** TC-1614 PART A  
**GENERAL USE:** Epoxy resin

#### MANUFACTURER

BJB Enterprises, Inc.  
 14791 Franklin Avenue  
 Tustin, CA 92780  
**Emergency Phone:** (714) 734-8450

#### 24 HR. EMERGENCY TELEPHONE NUMBERS

**CHEMTREC (USA & Canada):** (800) 424-9300  
 or (703) 527-3887 CCN# 2820

### 2. HAZARDS IDENTIFICATION

#### GHS CLASSIFICATIONS

##### Health:

Skin Irritation, Category 2  
 Eye Irritation, Category 2A  
 Skin Sensitization, Category 1  
 Target Organ Toxicity (Repeated exposure), Category 2

##### Physical:

Flammable Liquids, Category 3

#### GHS LABEL



Flame



Health hazard



Exclamation  
 mark

**SIGNAL WORD:** WARNING

#### HAZARD STATEMENTS

H226: Flammable liquid and vapour.  
 H315: Causes skin irritation.  
 H319: Causes serious eye irritation.  
 H317: May cause an allergic skin reaction.  
 H373: May cause damage to organs through prolonged or repeated exposure.

#### PRECAUTIONARY STATEMENTS

##### Prevention:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P233: Keep container tightly closed.  
 P240: Ground and bond container and receiving equipment.  
 P241: Use explosion-proof electrical/ventilating/lighting/material-handling equipment.  
 P242: Use non-sparking tools.  
 P243: Take action to prevent static discharges.  
 P260: Do not breathe dust/fume/gas/mist/vapours/spray.  
 P264: Wash thoroughly after handling.

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P272: Contaminated work clothing should not be allowed out of the workplace.

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

**Response:**

P370+P378: In case of fire: Use water spray, carbon dioxide, dry chemical, or foam for extinction.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P363: Wash contaminated clothing before reuse.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

P314: Get medical advice/attention if you feel unwell.

**Storage:**

P403+P235: Store in a well-ventilated place. Keep cool.

**Disposal:**

P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

| Chemical Name                              | Wt.%     | CAS        |
|--|----------|------------|
| Epoxy phenol novolac resin                 | 60 - 100 | 28064-14-4 |
| 1,4-Cyclohexanedimethanol diglycidyl ether | 5 - 10   | 14228-73-0 |
| Xylene                                     | 5 - 10   | 1330-20-7  |
| Ethylbenzene                               | 1 - 5    | 100-41-4   |
| Toluene                                    | < 0.1    | 108-88-3   |

**4. FIRST AID MEASURES**

**EYES:** Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get immediate medical attention.

**SKIN:** Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if irritation or rash develops. Wash clothing before reuse.

**INGESTION:** If swallowed, call a physician immediately. Do NOT induce vomiting. Provided the patient is conscious, wash out mouth with water. Never give anything by mouth to an unconscious person.

**INHALATION:** Remove to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get immediate medical attention.

**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**

**GENERAL HAZARD:** Flammable

**EXTINGUISHING MEDIA:** Water spray, carbon dioxide, dry chemical, or foam.

**HAZARDOUS COMBUSTION PRODUCTS:** Carbon monoxide, carbon dioxide, aldehydes, and phenolics.

**EXPLOSION HAZARDS:** Flammable liquid: Keep away from heat, sparks, and open flame. Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by heat, pilot lights, other flames and ignition sources at locations distant from material handling point.

**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.

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**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 (such as 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).

**ENVIRONMENTAL PRECAUTIONS**

**WATER SPILL:** Do not discharge into drains or rivers.

**GENERAL PROCEDURES:** Refer to section 8 of SDS for personal protection details.

**RELEASE NOTES:** Composition and extent of any spill should be evaluated against local regulations and reported to the proper agencies, if necessary.

**7. HANDLING AND STORAGE**

**GENERAL PROCEDURES:** Keep away from sources of ignition. 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 in a well ventilated area. Avoid heat, sparks, and open flames. Avoid breathing vapor and contact with eyes, skin, and clothing. Use appropriate personal protective equipment as specified in Section 8. Handle and use in a manner consistent with good industrial/manufacturing techniques and practices.

**STORAGE:** Store in a dry and well-ventilated place, away from excessive heat in the original or similar container. Avoid sources of ignition and incompatible materials. Protect from freezing. Containers should be tightly sealed to prevent contamination with foreign materials. Avoid unnecessary contact.

**STORAGE TEMPERATURE:** 65-80°F (18-27°C)

**SHELF LIFE:** 12 months from date of shipment under manufacturers recommended storage conditions.

**ELECTROSTATIC ACCUMULATION HAZARD:** This material can accumulate static charges which can cause an incendiary electrical discharge.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

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## EXPOSURE GUIDELINES

| OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200) |                 |      |     |                   |
|---|-----------------|------|-----|-------------------|
| Chemical Name                               | EXPOSURE LIMITS |      |     |                   |
|   | Type            |      | ppm | mg/m <sup>3</sup> |
| Epoxy phenol novolac resin                  | OSHA PEL        | TWA  | -   | -                 |
|   |                 | STEL | -   | -                 |
|   | ACGIH TLV       | TWA  | -   | -                 |
|   |                 | STEL | -   | -                 |
|   | NIOSH REL       | TWA  | -   | -                 |
|   |                 | STEL | -   | -                 |
| 1,4-Cyclohexanedimethanol diglycidyl ether  | OSHA PEL        | TWA  | -   | -                 |
|   |                 | STEL | -   | -                 |
|   | ACGIH TLV       | TWA  | -   | -                 |
|   |                 | STEL | -   | -                 |
|   | NIOSH REL       | TWA  | -   | -                 |
|   |                 | STEL | -   | -                 |
| Xylene                                      | OSHA PEL        | TWA  | 100 | 435               |
|   |                 | STEL | -   | -                 |
|   | ACGIH TLV       | TWA  | 100 | -                 |
|   |                 | STEL | 150 | -                 |
|   | NIOSH REL       | TWA  | 100 | 435               |
|   |                 | STEL | 150 | 655               |
| Ethylbenzene                                | OSHA PEL        | TWA  | 100 | 435               |
|   |                 | STEL | -   | -                 |
|   | ACGIH TLV       | TWA  | 100 | -                 |
|   |                 | STEL | 125 | -                 |
|   | NIOSH REL       | TWA  | 100 | 435               |
|   |                 | STEL | 125 | 545               |
| Toluene                                     | OSHA PEL        | TWA  | 200 | -                 |
|   |                 | STEL | -   | -                 |
|   |                 | C    | 300 | -                 |
|   | ACGIH TLV       | TWA  | -   | -                 |
|   |                 | STEL | -   | -                 |
|   | NIOSH REL       | TWA  | 100 | 375               |
| STEL  |                 | 150  | 560 |                   |

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

**PERSONAL PROTECTIVE EQUIPMENT**

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**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:** Slight solvent

**APPEARANCE:** Clear

**COLOR:** Colorless

**pH:** No data available

**PERCENT VOLATILE:** 9.2

**FLASH POINT AND METHOD:** 41.1°C (106°F) Pinsky-Martens CC

**VAPOR PRESSURE:** No data available

**VAPOR DENSITY:** No data available

**BOILING POINT:** No data available

**SOLUBILITY IN WATER:** Negligible

**SPECIFIC GRAVITY:** 1.13 (water=1) at 25°C (77°F)

**VISCOSITY #1:** 550 Centipoise at 25°C (77°F)

**(VOC):** < 104 g/l Calculated. Theoretical VOC minus water and exempt solvents.

**10. STABILITY AND REACTIVITY**

**REACTIVITY:** Hazardous reactions will not occur under normal transport or storage conditions.

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

**CONDITIONS TO AVOID:** High temperatures and sources of ignition.

**POSSIBILITY OF HAZARDOUS REACTIONS:** No data available

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide, carbon dioxide, aldehydes, and phenolics.

**INCOMPATIBLE MATERIALS:** Strong oxidizing agents, strong acids, and strong bases.

**11. TOXICOLOGICAL INFORMATION****ACUTE TOXICITY**

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| Chemical Name                              | ORAL LD <sub>50</sub> | DERMAL LD <sub>50</sub> | INHALATION LC <sub>50</sub>                |
|--|-----------------------|-------------------------|--|
| Epoxy phenol novolac resin                 | > 2000 mg/kg Rat      | > 2000 mg/kg Rabbit     | No data available                          |
| 1,4-Cyclohexanedimethanol diglycidyl ether | 2450 mg/kg Rat        | 2500 mg/kg Rabbit       | No data available                          |
| Xylene                                     | 3523 mg/kg Rat        | 12126 mg/kg Rabbit      | 5000 ppm Rat (4 h)                         |
| Ethylbenzene                               | 3500 mg/kg Rat        | 15400 mg/kg Rabbit      | 4000 ppm Rat (4 h)                         |
| Toluene                                    | > 5580 mg/kg Rat      | 12196 mg/kg Rabbit      | 12500 to 28800 mg/m <sup>3</sup> Rat (4 h) |

**SKIN CORROSION/IRRITATION:** Causes skin irritation.

**SERIOUS EYE DAMAGE/IRRITATION:** Causes serious eye irritation.

**RESPIRATORY OR SKIN SENSITISATION:** May cause sensitization by skin contact.

**GERM CELL MUTAGENICITY:** No data available

**CARCINOGENICITY**

| Chemical Name | IARC Status |
|---------------|-------------|
| Xylene        | 3           |
| Ethylbenzene  | 2B          |
| Toluene       | 3           |

**REPRODUCTIVE TOXICITY:** No data available

**STOT-SINGLE EXPOSURE:** No data available

**STOT-REPEATED EXPOSURE:** May cause damage to organs through prolonged or repeated exposure.

**ASPIRATION HAZARD:** No data available

**12. ECOLOGICAL INFORMATION**

**ENVIRONMENTAL DATA:** No data available

**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.

**BIOACCUMULATION/ACCUMULATION:** No data available

**DISTRIBUTION:** No data available

**CHEMICAL FATE INFORMATION:** No data available

**13. DISPOSAL CONSIDERATIONS**

**DISPOSAL METHOD:** The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protections and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**EMPTY CONTAINER:** Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. **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.**

**14. TRANSPORT INFORMATION****DOT (DEPARTMENT OF TRANSPORTATION)**

**PROPER SHIPPING NAME:** Flammable liquids, n.o.s.

**TECHNICAL NAME:** (xylene solution)

**PRIMARY HAZARD CLASS/DIVISION:** 3

**TC-1614 PART A****UN/NA NUMBER:** UN1993**PACKING GROUP:** III**NAERG:** 128**LABEL:** Flammable liquid**AIR (ICAO/IATA)****SHIPPING NAME:** Flammable liquid, n.o.s.**TECHNICAL NAME:** (xylene solution)**UN/NA NUMBER:** UN1993**PRIMARY HAZARD CLASS/DIVISION:** 3**PACKING GROUP:** III**ERG:** 3L**LABEL:** Flammable liquid**VESSEL (IMO/IMDG)****SHIPPING NAME:** Flammable liquid, n.o.s.**TECHNICAL NAME:** (xylene solution)**UN/NA NUMBER:** UN1993**PRIMARY HAZARD CLASS/DIVISION:** 3**PACKING GROUP:** III**LABEL:** Flammable liquid**SPECIAL PROVISIONS:** EmS: F-E, S-E**15. REGULATORY INFORMATION****UNITED STATES****SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)****311/312 HAZARD CATEGORIES:** Acute Health Hazard, Chronic Health Hazard, Fire 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        | 5 - 10 | 1330-20-7 |
| Ethylbenzene  | 1 - 5  | 100-41-4  |

**CERCLA (COMPREHENSIVE ENVIRONMENTAL 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  |
|---------------|--------|------------|
| Xylene        | 5 - 10 | 100 lbs.   |
| Ethylbenzene  | 1 - 5  | 1,000 lbs. |
| Toluene       | < 0.1  | 1,000 lbs. |

**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.

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**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):

| Chemical Name | Wt.%  | Listed                 |
|---------------|-------|------------------------|
| Ethylbenzene  | 1 - 5 | Cancer                 |
| Toluene       | < 0.1 | Developmental Toxicity |

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

**CANADA**

**WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM):** This product has been classified according to the hazard criteria of the CPR and the SDS contains all the information required by the CPR.

**DOMESTIC SUBSTANCE LIST (INVENTORY):** All components in this product are listed in or exempted from the Domestic Substances List (DSL) or the Non-Domestic Substances List (NDSL).

**GENERAL COMMENTS:** No data available

**16. OTHER INFORMATION**

**REASON FOR ISSUE:** Revision

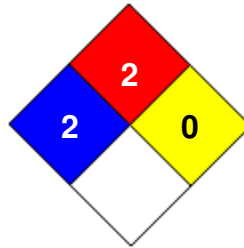
**Date Revised:** 07/21/2017

**REVISION SUMMARY:** This SDS replaces the 02/04/2015 SDS.

**HMIS RATING**

|                            |   |          |
|----------------------------|---|----------|
| <b>HEALTH</b>              | * | <b>2</b> |
| <b>FLAMMABILITY</b>        |   | <b>2</b> |
| <b>PHYSICAL HAZARD</b>     |   | <b>0</b> |
| <b>PERSONAL PROTECTION</b> |   | <b>X</b> |

**NFPA CODES**



**HMIS RATINGS NOTES:** Personal Protection: See Section 8

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