

Material Safety Data Sheet

TC-1570 PART B

Date of Preparation: 06/08/2005

Revision: 06/08/2005

Section 1 - Chemical Product and Company Identification

Product Name: TC-1570 PART B

Product Class: Epoxy hardener

Chemical Type: Polyamine

Manufacturer: BJB Enterprises, Inc., 14791 Franklin Avenue, Tustin, CA 92780, Phone (714) 734-8450, Fax (714) 734-8929, (M-Th: 8-4:30, F: 7:30-4), Emergency Phone: Chemtrec (800) 424-9300 or (703) 527-3887

Section 2 - Composition / Information on Ingredients

Ingredient Name	CASRN	% wt.
1. Diethylenetriamine (DETA)	111-40-0	<40
2. Phenol, 4,4'-(1-methylethylidene) bis-	80-05-7	<25
3. Epoxy Polyamine Adduct	Proprietary	>35

Section 3 - Hazards Identification

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Appearance: Straw yellow liquid; Odor: Irritating. Corrosive. Avoid skin contact. Avoid breathing vapors. May cause eye and skin irritation. Harmful if inhaled. Use in well-ventilated areas. Burning material will generate trace amounts of toxic fumes/gases. Keep away from heat and sources of ignition.

HMIS

H 3

F 1

R 0

PPE†

†Sec. 8

Potential Health Effects

Primary Entry Routes: Eye and skin contact; inhalation of vapors, accidental ingestion.

Acute Effects

Inhalation: Inhalation of aerosol may cause irritation to the upper respiratory tract. Can cause severe eye, skin and respiratory tract burns. May cause nose, throat, and lung irritation. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system.

Eye Contact: Product vapor in low concentrations can cause lacrimation, conjunctivitis and corneal edema when absorbed into the tissue of the eye from the atmosphere. Corneal edema can cause the perception of "blue haze" or "fog" around lights, although this is a temporary effect and has no known residual effect. Causes eye burns. May cause blindness. Severe eye irritation.

Skin Contact: Causes skin burns.

Ingestion: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

Aggravated Medical Conditions: Eye disease, Skin disorders and Allergies. Adverse skin effects (such as rash, irritation or corrosion). Adverse eye effects (such as conjunctivitis or corneal damage). Asthma. Adverse respiratory effects (such as cough, tightness of chest or shortness of breath).

Section 4 - First Aid Measures

Inhalation: Remove to fresh air environment. If breathing has stopped or is labored, give assisted respiration. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.

Ingestion: If swallowed, immediately give at least 3-4 glasses of water or milk. DO NOT INDUCE VOMITING. If vomiting occurs, give fluids again. If a person vomits when lying on his back, place him in the recovery position. Prevent aspiration of vomit. Turn victim's head to the side. Get immediate medical attention.

Eye Contact: Rinse immediately with plenty of water, including under the eyelids, for at least 20 minutes. Remove contact lenses. Obtain medical attention if irritation develops.

Skin Contact: Remove contaminated clothing and wash affected areas well with water for at least 20 minutes. Cover wound with sterile dressing. Launder contaminated clothing before use.

Note to Physicians: Treat any ill effects symptomatically.

Section 5 - Fire-Fighting Measures

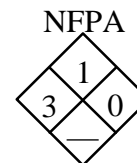
Flash Point/Method: >212° F (100° C) Closed cup

Extinguishing Media: Carbon dioxide, dry chemical, alcohol-resistant foam, dry sand or limestone powder.

Unusual Fire or Explosion Hazards: Decomposition and combustion products may be toxic. May generate ammonia gas. May generate toxic nitrogen oxide gases. Incomplete combustion may form carbon monoxide. Downwind personnel must be evacuated. Burning produces obnoxious and toxic fumes.

Fire-Fighting Instructions: Cool fire exposed containers with water spray. Remove containers from 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.



Section 6 - Accidental Release Measures

Spill /Leak Procedures: Provide adequate ventilation and wear personal protective equipment. Evacuate personnel as a precaution. Prevent product spill from entering sewers, streams, or drinking water supplies. Collect liquid or soak up with inert filler or an absorbent, such as dry earth, sand, or oil absorbent (sweeping) compound. Collect material into suitable containers for disposal. Wash area with dilute ammonia solution.

Containment: For large spills, dike ahead of liquid spill for later neutralization, absorption, clean up, and disposal.

Section 7 - Handling and Storage

Handling Precautions: Avoid contact with eyes, skin and clothing. Avoid breathing vapor over open container.

Storage Requirements: Store in a cool, dry place away from excessive heat in original or similar waterproof containers. Do not store near acids. Avoid unnecessary contact. Protect from freezing. Containers should be tightly sealed to prevent contamination with foreign materials. Optimum storage temperature is 65° - 80°F (18° - 27°C).

Shelf life: 12 months from date of shipment under manufacturers recommended storage conditions.

Section 8 - Exposure Controls / Personal Protection

Exposure Limits:

Diethylenetriamine (DETA) (111-40-0)

TWA/ACGIH: 1ppm

REL/NIOSH: 1ppm, 4mg/m³

Phenol, 4,4'-(1-methylethylidene) bis- (80-05-7)

Not established

Epoxy Polyamine Adduct (Proprietary)

Not established

Eye Protection Requirements: Safety goggles or glasses are recommended. Plastic face shield should be worn for complete face protection.

Skin Protection Requirements: Impermeable gloves should be worn. Employees should wash their hands and face before eating, drinking, or using tobacco products.

Ventilation/Respiratory Requirements: Exhaust ventilation recommended. An organic vapor cartridge or fresh air supplied respirator (NIOSH certified) 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).

Additional Protective Measures: Safety showers and eye wash stations should be easily accessible to the work area. Training is important. Follow all label precautions.

Section 9 - Physical and Chemical Properties

Flash Point/Method: >212° F (100° C) Closed cup

Physical State: Liquid

Appearance and Odor: Straw yellow; irritating odor

Vapor Pressure: <1 mm Hg at 70°F (21°C)

Specific Gravity (H₂O=1): 1.08

pH: Alkaline

Water Solubility: Slight

Boiling Point: >392°F (200°C)

Viscosity: 3,500 cps

% Volatile: Nil

V.O.C. (ref EPA meth 24): N/A

Section 10 - Stability and Reactivity

Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Polymerization: Hazardous polymerization will not occur.

Chemical Incompatibilities/Conditions to Avoid: Organic acids (i.e. acetic acid, citric acid, etc.). Mineral acids. CAUTION! N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations. Nitrous acid and other nitrosating agents. Oxidizing agents.

Hazardous Decomposition: Carbon monoxide. Carbon dioxide (CO₂). Nitrogen oxides (Nox). Nitrogen oxide can react with water vapors to form corrosive nitric acid. Ammonia. Nitrosamine.

Section 11- Toxicological Information

Animal Toxicity:

TC-1570 Part B (Estimated)

LD50 Acute Oral, Rat:>2,000 mg/kg

LD50 Acute Dermal, Rabbit: >2,000 mg/kg

Diethylenetriamine (DETA) (111-40-0)

LC50 Acute Inhalation, Rat: >0.07 - <0.3 mg/l (4 h)

Section 12 - Ecological Information

No Ecological Information Available

Section 13 - Disposal Considerations

Waste Disposal Method: Dispose of in compliance with federal, state, or local environmental control regulations.

Section 14 - Transport Information

Shipping Name: Amines, liquid, corrosive, n.o.s.

DOT (USA): Regulated

Technical Shipping Name: (Diethylenetriamine)

Class 8, PG III

Hazard Class: 8

IATA/ICAO: Regulated

ID No.: UN2735

Class 8, PG III

Packing Group: III

IMO/IMDG: Regulated

Label: Corrosive

Class 8, PG III

Section 15 - Regulatory Information

U.S. Federal Regulations:

OSHA:

This document has been prepared in accordance with the MSDS requirements of the OSHA Hazard Communication Standard.

SARA TITLE III:

Sections 311/312 Hazard Classification:

Acute Health Hazard

Section 313: This product contains the following substances subject to the reporting requirements of EPCRA, Section 313 and 40 CFR Part 372:

Phenol, 4,4' - (1-methylethylidene) bis-

CAS# 80-05-7

<25%

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

This product contains the following substances subject to export notification under Section 12 (b) of TSCA:

None

WHMIS Hazard Classification:

Very Toxic Material Causing Other Toxic Effects, Toxic Material Causing Other Toxic Effects, Corrosive Material.

Section 16 - Other Information

Reason for Issue: New Issue

Approval Date: 06/08/2005

Supersedes Date: 03/02/2005

Disclaimer: This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of BJB Enterprises, Inc. The data on this sheet relates only to the specific material designated herein. BJB Enterprises, Inc. assumes no legal responsibility for use or reliance upon these data.