



MATERIAL SAFETY DATA SHEET

1533 W. Henrietta Rd.
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(716) 226-6177

MSDS No. BB 117-X
Effective Date July 16, 1998

SECTION V HEALTH HAZARD DATA

BB 117-X

Threshold Limited Value None established for this mixture. (ACGIH 1992-93). As styrene, monomer CAS No. 100-42-5 8 hr. TWA (Air) 50ppm, 215mg/m³.

Effects of Overexposure Styrene at 400ppm or in strong concentration is irritating to all parts of the respiratory tract. May cause headache, nausea, insensibility and other central nervous system effects. May be fatal at 10,000 ppm, may cause liver and kidney damage. Somewhat anesthetic. Ingestion may cause gastrointestinal disturbances, pain and discomfort. May cause eye irritation, lachrymation. May cause skin irritation, possible dermatitis.

Emergency and First Aid Procedures
INGESTION: If swallowed, do NOT induce vomiting (aspiration hazard). Get immediate medical attention. Never give anything by mouth to an unconscious person. **INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call physician. **EYES:** Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. **SKIN:** Flush thoroughly with water, then wash with mild soap and water.

SECTION VI REACTIVITY DATA

Stability	Unstable		Conditions to Avoid	Heat and direct sunlight.
	Stable	X		

Incompatibility (Materials to Avoid) Strong acids and oxidizing agents.

Hazardous Decomposition Products Carbon monoxide, carbon dioxide, low molecular weight hydrocarbons and organic acids.

Hazardous Polymerization	Conditions to Avoid	
	May Occur	Will Not Occur
X		

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled Remove saturated clothing promptly and wash affected areas with soap and water. Remove all sources of ignition. Ventilate area. Absorb with inert materials such as vermiculite or sand and place in a closed container.

Waste Disposal Method Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.

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

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type) Work in ventilation hood. Respiratory protection must be worn to prevent inhalation of heated vapors, spray mists or if TLV is exceeded.

Ventilation	Local Exhaust	Recommended.	Special	No.
	Mechanical (General)	Recommended.	Other	Adequate to maintain below exposure limit.

Protective Gloves Plastic or rubber. **Eye Protection** Chemical safety glasses.

Other Protective Equipment Face shield, chemical goggles, lab coat, proper gloves, eye wash station, fire extinguisher, safety shower.

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing Avoid storage above 100°F (38°C). Avoid prolonged or repeated skin contact and inhalation of heated vapors or spray mists. Wash thoroughly after handling. Keep container tightly closed when not in use.

Other Precautions Read label on container before using. Do not wear contact lenses when working with chemicals. Avoid improper addition of promoter and/or catalyst. A promoter and catalyst used with this product should always be mixed separately with the product and must never be mixed together. All storage should conform to local fire and building codes. Remove and wash contaminated clothing.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Revision No. 5	Date 7/16/98	Approved Michael Raszeja	Chemical Safety Coordinator MR
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The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. * Hazardous Materials Industrial Standards. Printed on recycled paper.

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	SYNTHETIC RESIN	
Chemical Synonyms	N/A	
Formula	Complex mixture.	
Unit Size	up to 20 Lt.	
C.A.S. No.	None assigned.	

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CHEMTREC
800-424-9300
Day 716-226-6177

Health	2
Fire	3
Reactivity	2

NFPA HAZARD RATING

LEAST	SLIGHT	MODERATE	HIGH	EXTREME
0	1	2	3	4

HMIS *

1	2	3	4
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SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Greater than 50% unsaturated polyester resin: (CAS No. None assigned)		Not established.
Less than 40% Styrene Monomer: (CAS No. 100-42-5)		100ppm (OSHA) Air.
Less than 10% Methyl Methacrylate Monomer: (CAS No. 80-62-6)		100ppm (ACGIH).

DANGER! FLAMMABLE LIQUID!

SECTION III PHYSICAL DATA

Melting Point (°F)	Not determined.	Specific Gravity (H₂O = 1)	1.05-1.22 @ 25°C.
Boiling Point (°F)	121°C (250°F) Approx.	Percent Volatile by Volume (%)	Less than 50%.
Vapor Pressure (mm Hg)	Not determined.	Evaporation Rate (Ether = 1)	Less than 1.
Vapor Density (Air=1)	3.6 (Styrene).		
Solubility in Water	Negligible.		
Appearance & Odor	Blue-green clear, viscous liquid; pungent odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	85°F (29°C) (SFCC)	Flammable Limits in Air % by Volume	Lower	Upper
		Styrene	1.1	7.0

Extinguisher Media Foam; carbon dioxide (CO₂); dry chemical (ABC).

SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH/MSHA-approved, self-contained breathing apparatus and protective clothing to avoid contact with skin and eyes.

(1996 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.7, GUIDE PAGE NO. 127)

UNUSUAL FIRE AND EXPLOSION HAZARDS

Styrene will polymerize readily at elevated temperatures of fire conditions. If this occurs in a closed container, there is a possibility of violent rupture. Product vapors may form an explosive mixture in air.

D.O.T. RESIN SOLUTION, 3, UN 1866, PG III

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20