CSS POLYMERS, INC 2659 Freedom Parkway, Ste 294 Cumming, GA 30041 770-645-0101

MATERIAL SAFETY DATA SHEET

I. PRODUCT INFORMATION

PRODUCT: Asphalt-Mend Series Component B

CHEMICAL NAME: Polyether Polyol Blend
CHEMICAL FAMILY: Urethane System Resin Component
DATE: June 2000

II. HAZARDOUS COMPONENTS

Component	CAS NO.	PEL-Source	Concentration					
Composition of this Formula is a Trade secret.								
Di-(methylthio)toluenediamine DMTDA	106264-79-3	Not Determined	Trade Secret					
Tertiary Amine Catalyst	111-18-2	Not Established	Trade Secret					
OrganoTin Catalyst	Not Available	Not Established	Trade Secret					

III. PHYSICAL DATA

Boiling Point	: Not Established
Specific Gravity/ Bulk Density:	
Vapor Pressure, mm Hg @ 20 ⁰ C	
Solubility in H ₂ 0	

Appearance & Odor...... Light to Dark Amber liquid, slight Ammonia odor

IV. FIRE AND EXPLOSION HAZARD DATA

Flash Point/Method.....: 350⁰ F, PMCC Flammable Limits(STP).....: Not Determined

Fire & Explosion Hazard......Low Hazard

Special Fire Fighting Procedures...... Turnout gear, self-contained breathing

apparatus for protection against suffocation

and toxic decomposition products.

Emergency Numbers: CSS Polymers: (770) 645-0101

V. HEALTH HAZARD DATA

Ingestion: The tertiary amine catalyst(s) used in this material can cause severe damage to the mucous membrane if swallowed. Liver and kidney damage can occur.

The DMTDA is expected to be absorbed through the gastrointestinal tract.

Eye Contact: The tertiary amine catalyst(s) and the polyoxypropylenadiamine used in this blend are severely irritating and corrosive to the eyes. Chronic Exposure to liquid amines will cause severe pain with excess tear production and tight closure of the eyelids. There will be severe conjunctivitis seen as marked redness and swelling of the conjunctiva. Severe corneal injury will develop and, if not promptly treated may lead to permanent impairment of vision. The organo-tin catalyst is also a severe irritant, by itself. Skin Contact: The tertiary amine and organo-tin catalyst used in this blend are by themselves severely irritating to and can be absorbed through the skin on prolonged contact.

Chronic effects of overexposure:

DMTDA: Warning: Chemicals similar in structure to DMTDA have been found to cause chronic organ and systemic effects and cancer in laboratory animals. The EPA based this conclusion on analogy to 2,4- and 2,6-toluenediamine(TDA) and 2,4-diaminoanisole (DAA) which were found to cause chronic toxicity and/or carcinogenicity in animal studies. There are no animal carcinogenic or chronic toxicity studies on DMTDA. A two year carcinogenicity bioassay on DMTDA is planned. The most pertinent carcinogenic study completed on DMTDA is in the in-vitro cell transformation assay. A positive assay indicates carcinogenic potential. For comparison, 2,4-TDA was positive while DMTDA was negative. To protect yourself, you must impervious gloves, chemical safety goggles or equivalent eye protection and protective clothing while handling this chemical. In addition, you must wear a respirator if there is potential inhalation exposure. DMTDA caused delayed contact hypersensitivity in laboratory animals.

Inhalation: The tertiary amine catalyst released from this mixture may include nasal irritation, dizziness, fatigue, nausea, headache, possible loss of consciousness or asphyxiation. Tertiary amine catalyst(s) may be released during normal processing conditions. Proper precautionary steps should be taken to maintain amine levels below irritating levels. High vapor concentrations of amine catalyst(s) may cause lung damage and glaucopsia.

Emergency and First Aid Procedures:

Eyes: Flush with copious amounts of water for at least 15 minutes. Consult physician.

Skin: Wash material off of the skin with plenty of soap and water. Consult physician if irritation persists. Do not apply grease or ointments.

Inhalation: Move to an area free from risk of further exposure. Consult medical personnel.

Ingestion: DO NOT INDUCE VOMITING. If person is conscious and can swallow, immediately give two glasses of water. If vomiting occurs, give fluids again. Never give anything by mouth to an unconscious person. Consult physician.

VI. REACTIVITY DATA

Stability	: Stable under normal conditions.
Hazardous Decomposition Products	: CO, CO ₂ , NOx, SO ₂ , SO ₃ , H ₂ S
Incompatibility (chemicals to avoid)	: Strong acids and oxidizing agents.
Hazardous Polymerization	: Will not occur.

VII. SAFE HANDLING AND USE INFORMATION

Eye Protection......: Safety glasses or goggles required; do not wear contact lenses. Skin Protection......: Clothing to prevent skin contact.

Ventilation......:Required to maintain amine catalyst levels below irritating levels. Respiratory Protection: A NIOSH approved respirator, if, levels of amine catalyst are above acceptable limits.

VIII. SPILL OR LEAK PROCEDURES

Spill and Leak Procedures: Dike with absorbent material and place in overpack for disposal.

Waste Disposal: Dispose of according to local state and federal regulations. Under the CERCLA/RCRA regulations currently in effect, this product is not regulated as a hazardous material.

IX. FEDERAL REGULATORY INFORMATION

TSCA: All components in this mixture are listed on the inventory.

SARA HAZARD CATEGORY: Immediate health, Delayed health, Fire.

NFPA Hazard Rating:

Health Fire 3		Reactivity 0		Other 0	
0= Insignificant	1=Slight	2=Moderate	3=High	4=Extreme	

We believe that the information contained in this MSDS is current. Since the use of this information and the conditions of use of the product are not within our control, it is the users obligation to determine the conditions of safe use of this product. The information herein is given in good faith, but no warranty, expressed or implied, is made.