

# Xthane TD-D75E

Modified Toluene Diisocyanate (TDI) Terminated Polyether Prepolymer

Typical Properties of TD-D75E Prepolymer			
NCO, %	9.5 – 9.8	Viscosity @ 212°F (100°C)	230
Specific Gravity @ 70°C	1.21		
Appearance @ 25°C	Viscous liquid	Flash Point for TDI	480°F (249°C)

### Product Description:

Xthane TD-D75E is a TDI terminated polyether prepolymer for use in high property elastomers, elastomeric coatings and adhesives applications. As with all polyurethane products, application and field testing are necessary to determine suitability of the selected product or product combination for each specific application.

### Storage and Handling:

Containers should be kept tightly closed to prevent moisture contamination. TDI will react with water to liberate CO<sup>2</sup> gas potentially causing containers to expand and rupture. Do not reseal if contamination is suspected. Use of a dry nitrogen blanket for partial drums is recommended. Storage for Xthane TD-D75E should be maintained in a cool, dry place at ambient temperatures. Exposure to temperatures over 350°F (177°C) can create excessive pressure potentially causing containers to rupture.

Do not breathe aerosol or vapors and avoid contact with skin and eyes. Use protective equipment including respirator when handling heated TDI as exposure to vapors of heated TDI can be dangerous. To heat product properly, use well ventilated convection ovens. Avoid using drum heaters.

Typical Physical Properties using MOCA		TD-D75E
Hardness	Shore D	75
Resilience	% Rebound	45
Split Tear Strength	PLI	150
Die C Tear Strength	PLI	975
Tensile Strength	PSI	8700
Ultimate Elongation	%	260
100% Modulus	PSI	5150
200% Modulus	PSI	
300% Modulus	PSI	
Compression Set	%	48
Compression Deflection	15%	
Taber Abrasion	Mg Loss	-

Processing Characteristics using MOCA		TD-D75E
NCO Range		9.5 – 9.8%
Curative: MOCA	pph	29.2
Curative Level	Stoichiometry	95 %
Prepolymer Temperature		150 - 180°F
Curative Temperature		220 - 235 °F
Pot Life	Minutes	1 - 2
Demold Time	Minutes	10
Recommended Cure Time	@ 200°F	12 hours

### Health and Safety Information:

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling any of the products listed above. Before working with these products, it is your responsibility to read and become familiar with the available information on its hazards, proper use and handling. This is extremely important and cannot be overemphasized. Information is available in several forms, e.g. material safety data sheets and product labels. To obtain this information, contact your ITWC, Inc. representative.