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## Erapol L-E95A

POLYETHER (PTMEG) TDI PREPOLYMER

### TECHNICAL DATASHEET

Erapol L-E95A is a liquid isocyanate terminated pre-polymer based on PTMEG polyether polyol.

Polymers made from Erapol L-E95A exhibit outstanding abrasion, impact and chemical resistance, along with high load bearing capacity.

Moreover, Erapol L-E95A is a lower free TDI version of Erapol E95A.

### Application

Typical uses of this polymer include sheeting, forklift truck tyres, rolls, and gears, die pads etc.

### Product Specification

% NCO	6.00 ± 0.20
Specific Gravity at 77°F (25°C)	1.07
Viscosity at 176°F (80°C) (cps)	300 - 700
Colour	Clear, light amber

### Mixing and Curing Conditions

		L-E95A / MOCA	L-E95A / Eracure 300	L-E95A / Eracure 110
Erapol L-E95A	(pph)	100	100	100
MOCA Level	(pph)	18.0	-	-
Eracure 300 Level	(pph)	-	14.5	-
Eracure 110 Level	(pph)	-	-	15.4
Recommended % Theory		95	95	95
Erapol Temperature	°F (°C)	167 – 185 (75 – 85)	149 -167 (65 – 75)	149 -167 (65 – 75)
Curative Temperature	°F (°C)	230 – 248 (110-120)	68 – 86 (20 – 30)	68 – 86 (20 – 30)
Pot Life	(mins)	6 - 10	4 - 8	6 - 7
Demould Time at 212°F (100°C)	(mins)	30 - 60	30 - 60	45 - 60
Post Cure Time at 212°F (100°C)	(hrs)	16	16	16



This information is of general nature and is supplied without recommendation or guarantee. It does not make claim to be free from patent infringement. Properties shown are typical and do not imply specification tolerances. Era Polymers cannot accept liability for loss or damage through use. Whilst these technical details are based on expert knowledge, practical experience and laboratory testing, successful application depends upon the nature and conditions in which the products are supplied. Users must, by comprehensive testing, evaluate this product in their own application.

## Physical Properties

Properties presented below are to be used as a guide and not intended for specification purposes.

		L-E95A / MOCA	L-E95A / E300*	L-E95A / E110**	TEST METHOD
<b>Hardness</b>	(Shore A)	95	93	93	ASTM D2240
<b>Tensile Strength</b>	psi (MPa)	5221 (36)	5076 (35)	4859 (33.5)	ASTM D412
<b>100% Modulus</b>	psi (MPa)	1813 (12.5)	1610 (11.1)	1465 (10.1)	ASTM D412
<b>300% Modulus</b>	psi (MPa)	2959 (20.4)	2698 (18.6)	2843 (19.6)	ASTM D412
<b>Elongation</b>	(%)	490	530	520	ASTM D412
<b>Angle Tear Strength, Die C</b>	pli (kN/m)	639.5 (112)	617 (108)	617 (108)	ASTM D624
<b>Split Tear Strength</b>	pli (kN/m)	337 (59)	382.5 (67)	354 (62)	AS1683.12
<b>DIN Resilience</b>	(%)	42	44	49	DIN 53512
<b>DIN Abrasion Resistance 10N</b>	(mm <sup>3</sup> )	54	51	57	ASTM D5963
<b>Compression Set / 22hrs at 158°F</b>	(%)	37	-	-	ASTM D395
<b>Cured Specific Gravity</b>	(g/cm <sup>3</sup> )	1.12	1.12	1.11	ASTM D1817

Please note \* Eracure 300

\*\* Eracure 110

## Processing Procedure

1. **Erapol L-E95A** should be heated to 167-185°F (80 ± 5°C) and thoroughly degassed at -95 kpa of vacuum until excessive foaming stops.
2. The curative should be added to **L-E95A**, the MOCA must first be melted at 230-248°F (110 - 120°C) prior to mixing and Eracure 300/Eracure 110 processed at room temperature. After adding the curative, mix thoroughly, being careful not to introduce air into the mixture.
3. Pour mixed materials into moulds that have been preheated to 176-212°F (80 - 100°C) and pre-coated with release agent.

## Adhesion

Adhesion of Erapol based elastomers to various substrates is at best marginal if a primer is not used. Please consult Era Polymers for specific recommendations to improve adhesion.

## Handling Precautions

**Erapol L-E95A** contains small amounts of free TDI. Therefore the product should be used in well-ventilated areas. Avoid breathing in vapours and protect skin and eyes from contact.

In case of skin contact, immediately remove excess, wash with soap and water. For eye contact, immediately flush with water for at least 15 minutes. Call a physician.

If nose, throat or lungs become irritated from breathing in vapours, remove exposed person to fresh air. Call a physician.