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## Erapol L-ETL91A

POLYETHER (PPG) TDI PREPOLYMER

### TECHNICAL DATASHEET

**Erapol L-ETL91A** is a liquid isocyanate terminated pre-polymer based on PPG polyol. Having a PPG backbone means that this pre-polymer is considerably more economical than polymers made from PTMEG.

Additionally **Erapol L-ETL91A** can be blended with premium grade compounds to product formulations to intermediate performance/cost.

Moreover, **Erapol L-ETL91A** has a lower free TDI content compared to conventional grades.

### Application

Generally used in applications where the outstanding properties of PTMEG based materials are not needed.

### Product Specification

% NCO	5.00 ± 0.20
Specific Gravity at 77°C (25°C)	1.03
Viscosity at 176°F (80°C) (cps)	100 - 500
Colour	Amber

### Mixing and Curing Conditions

		L-ETL91A / MOCA	L-ETL91A / Eracure 300
Erapol L-ETL91A	(pph)	100	100
MOCA Level	(pph)	15.0	-
Eracure 300 Level	(pph)	-	12.0
Recommended % Theory		95	95
Erapol Temperature	°F (°C)	167 – 185 (75 – 85)	140 – 158 (60 – 70)
Curative Temperature	°F (°C)	230 – 248 (110 – 120)	68 – 86 (20 – 30)
Pot Life	(mins)	6	5
Demould Time at 212°F (100°C)	(hrs)	1	1
Post Cure Time at 212°F (100°C)	(hrs)	16	16



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## Physical Properties

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

		L-ETL91A / MOCA
<b>Hardness</b>	(Shore A)	90
<b>Tensile Strength</b>	psi (MPa)	3916 (27)
<b>100% Modulus</b>	psi (MPa)	1059 (7.3)
<b>300% Modulus</b>	psi (MPa)	1900 (13.1)
<b>Elongation</b>	(%)	435
<b>Angle Tear Strength, Die C pli</b>	(kN/m)	468 (82)
<b>DIN Resilience</b>	(%)	-
<b>DIN Abrasion Resistance 10N</b>	(mm <sup>3</sup> )	139
<b>Compression Set / 22hrs at 158°F</b>	(%)	45
<b>Cured Specific Gravity</b>	(g/cm <sup>3</sup> )	1.10

## Processing Procedure

1. **Erapol L-ETL91A** should be heated to the recommended processing temperature and thoroughly degassed at -95kpa of vacuum until excessive foaming stops.
2. The curative should be added to **L-ETL91A**, the MOCA must first be melted at 230 – 248°F (110 - 120°C) prior to mixing. After adding the curative, mix thoroughly, being careful not to introduce air into the mixture.
3. Pour mixed **L-ETL91A/MOCA** 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 recommendation to improve adhesion.

## Handling Precautions

**Erapol L-ETL91A** 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.