



Era Polymers Pty. Ltd.
25-27 Green Street, Banksmeadow
Sydney, NSW 2019
AUSTRALIA
www.erapol.com.au

Erapol ETL75A

POLYETHER (PPG) TDI PREPOLYMER

TECHNICAL DATASHEET

Erapol ETL75A is a liquid isocyanate terminated pre-polymer based on PPG polyol.

Having a PPG backbone means that this polymer is considerably cheaper than polymers made from PTMEG.

Additionally **Erapol ETL75A** can be blended with premium grade compounds to product formulations to intermediate performance/cost.

Application

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

Product Specification

% NCO	2.85 ± 0.15
Specific Gravity at 77°C (25°C)	1.02
Viscosity at 176°F (80°C) (cps)	500 - 1500
Colour	Amber

Mixing and Curing Conditions

		ETL75A / MOCA	ETL75A / Eracure 300
Erapol ETL75A	(pph)	100	100
MOCA Level	(pph)	8.6	-
Eracure 300 Level	(pph)	-	6.9
Recommended % Theory		95	95
Erapol Temperature	°F (°C)	167 – 185 (75 – 85)	149 – 158 (65 – 70)
Curative Temperature	°F (°C)	230 – 248 (110 – 120)	77 – 86 (25 – 30)
Pot Life	(mins)	25	17
Demould Time at 212°F (100°C)	(hrs)	3 - 4	3 - 4
Post Cure Time at 212°F (100°C)	(hrs)	16	16



This information is of general nature and is supplied without recommendation of 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.

		ETL75A / MOCA	TEST METHOD
Hardness	(Shore A)	75	ASTM D2240
Tensile Strength	psi (MPa)	1740 (12)	ASTM D412
100% Modulus	psi (MPa)	435 (3.0)	ASTM D412
300% Modulus	psi (MPa)	711 (4.9)	ASTM D412
Elongation	(%)	780	ASTM D412
Angle Tear Strength, Die C	pli (kN/m)	245.5 (43)	ASTM D624
Split Tear Strength	pli (kN/m)	85.6 (15)	AS1683.12
DIN Abrasion Resistance 10N	(mm ³)	209	ASTM D5963
Cured Specific Gravity	(g/cm ³)	1.11	ASTM D1817

Processing Procedure

1. **Erapol ETL75A** 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 **ETL75A**, the MOCA must first be melted at 230 – 248°F (110 - 120°C) prior to mixing and Eracure 300 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 recommendation to improve adhesion.

Handling Precautions

Erapol ETL75A 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.