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

Applications

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 25°C	1.02
Viscosity at 80°C (cps)	500 - 1500
Colour	Amber

Mixing and Curing Conditions

		ETL75A / MOCA	ETL75A / Ethacure 300
Erapol ETL75A	(pph)	100	100
MOCA Level	(pph)	8.6	-
Ethacure 300 Level	(pph)	-	6.9
Recommended % Theory		95	95
Erapol Temperature	(°C)	75 - 85	65 - 70
Curative Temperature	(°C)	110 - 120	25 - 30
Pot Life	(mins)	25	17
Demould Time at 100°C	(hrs)	3 - 4	3 - 4
Post Cure Time at 100°C	(hrs)	16	16

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)	77 ± 3	AS1683.15
Tensile Strength	MPa (psi)	12 (1740)	AS1683.11
100% Modulus	MPa (psi)	3.0 (435)	AS1683.11
300% Modulus	MPa (psi)	4.9 (711)	AS1683.11
Elongation	(%)	780	AS1683.11
Angle Tear Strength, Die C	(kN/m)	43	AS1683.12
Trouser Tear Strength	(kN/m)	15	AS1683.12
DIN Abrasion Resistance 10N(mm^3)		209	AS1683.21
Cured Specific Gravity	(g/cm^3)	1.11	AS1683.4

Processing Procedure

1. **Erapol ETL75A** should be heated to the recommended processing temperature and thoroughly degassed at -95 kpa of vacuum until excessive foaming stops.

2. The curative should be added to **ETL75A**, the MOCA must first be melted at 110 - 120°C prior to mixing and Ethacure 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 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 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.