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Erapol ETL75D

MEDIUM PERFORMANCE POLYETHER BASED
URETHANE ELASTOMERS

TECHNICAL DATASHEET

Erapol ETL75D is a liquid isocyanate terminated prepolymer based on medium performance polyether polyols.

Polymers made from **Erapol ETL75D** exhibit high impact strength, medium flex modulus coupled with good abrasion and chemical resistance, as well as high load bearing capacity.

Elastomers made from this product are suitable for structural parts.

Product Specification

% NCO	11.2 ± 0.2
Specific Gravity @ 25°C	1.10
Viscosity @ 80°C (cps)	300 – 500
Colour	Clear, light amber

Mixing and Curing Conditions

		ETL75D/ MOCA	ETL75D / Ethacure 300
Erapol ETL75D	(pph)	100	100
MOCA Level	(pph)	30.5	-
Ethacure 300 level	(pph)	-	24.5
Recommended % Theory		85	85
Erapol Temperature	(°C)	55 - 65	55 - 65
Curative Temperature	(°C)	110 - 120	20 - 30
Pot Life	(mins)	Less than 1	Less than 1
Demould Time @ 100°C	(hrs)	1	1
Post Cure Time @ 100°C	(hrs)	16	16

All results are based on 100 grams of **Erapol ETL75D** at 65°C.



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.

		ETL75D/MOCA	TEST METHOD
Hardness	(Shore D)	75 ± 5	AS1683.15
Tensile Strength	MPa (psi)	38 (5497)	AS1683.11
Tear Strength	(kN/m)	110	AS1683.12
Elongation	(%)	200	AS1683.11
Compression Set / 22 hr @ 70°C	(%)	50	AS1683.13
Cured Specific Gravity	(g/cm ³)	1.1	AS1683.4

Processing Procedure

- Erapol ETL75D** should be heated to 60 ± 5°C and thoroughly degassed at 1-5 mmHg of vacuum until excessive foaming stops.
- The curative should be added to the preheated **Erapol ETL75D** and mixed thoroughly, being careful not to introduce air into the mixture.
- Pour mixed polymer into moulds that have been preheated at 100 - 110°C and precoated with release agent.

NOTE: When using MOCA, if post cure temperature is less than 100 - 110°C, the polymer may have a glassiness/brittle appearance.

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.

The following primers are recommended for the various substrates:

AD-6	Two component metal primer, room temperature cure.
AD-1147	Single component metal primer, ambient to 100oC cure.
PR-1167	Single component primer for rubber and polyurethanes.

NOTE: It is important that all dirt, rust, grease and all be removed from surfaces prior to applying the primers.

Handling Precautions

Erapol ETL75D 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.

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