



Era Polymers Pty. Ltd.
2-4 Green Street, Banksmeadow
Sydney, NSW 2019
AUSTRALIA
www.erapol.com.au

Erapol ETL69D

MEDIUM PERFORMANCE POLYETHER BASED
URETHANE ELASTOMERS

TECHNICAL DATASHEET

Erapol ETL69D is a liquid isocyanate terminated prepolymer based on medium performance polyether polyols.

Product Specification

% NCO	8.05 ± 0.20
Specific Gravity at 25°C	1.10
Viscosity at 80°C (cps)	300 – 800
Colour	Amber

Typical Cured Properties

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

Mixing and Curing Conditions

		ETL69D/ MOCA	ETL69D / Ethacure 300
Erapol ETL69D	(pph)	100	100
MOCA Level	(pph)	21.8	-
Ethacure 300 level	(pph)	-	18.5
Recommended % Theory		85	90
Erapol Temperature	(°C)	55 - 65	55 – 65
Curative Temperature	(°C)	105- 115	20 - 30
Pot Life	(mins)	3	2
Demould Time at 100°C	(hrs)	1	1
Post Cure Time at 100°C	(hrs)	16	16

All results are based on 100 grams of Erapol ETL69D at 65°C.



Additional Mix Ratio

		Mix Ratio By Weight	Mix Ratio By Volume
Erapol ETL69D	(pph)	100	100
AH-40 II Level	(pph)	21.5	18.8

Physical Properties

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

		ETL69D/MOCA	TEST METHOD
Hardness	(Shore D)	70 ± 3	AS1683.15
Tensile Strength	MPa (psi)	37 (5366)	AS1683.11
100% Modulus	MPa (psi)	13.8 (2001)	AS1683.11
Trouser Tear Strength	(kN/m)	-	AS1683.12
Angle Tear Strength, Die C	(kN/m)	110	AS1683.12
Elongation	(%)	300	AS1683.11
DIN Resilience	(%)	50	DIN 53512
DIN Abrasion Resistance 10N	(mm ³)	160	AS1683.21
Compression Set / 22 hr at 70°C	(%)	50	AS1683.13
Cured Specific Gravity	(g/cm ³)	1.15	AS1683.4

Processing Procedure

1. Erapol ETL69D should be heated to 60 + 5°C and thoroughly degassed at -95kpa of vacuum until excessive foaming stops.
2. MOCA should be added to the preheated Erapol ETL69D and mixed thoroughly, being careful not to introduce air into the mixture.
3. Pour mixed polymer into moulds that have been preheated at 100 - 110°C and pre-coated 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.



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.

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 ETL69D 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.