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Erapol EMP97A

MEDIUM PERFORMANCE POLYETHER BASED
URETHANE ELASTOMER

TECHNICAL DATASHEET

Erapol EMP97A is a liquid prepolymer based on polyols that provide physical properties between Erapol High Performance Elastomers and Erapol Low Cost Elastomers.

Polymers made from **Erapol EMP97A** exhibit good abrasion resistance, high load bearing capability, low heat build up and excellent low temperature flexibility.

Product Specification

% NCO	7.0 ± 0.2
Specific Gravity at 25°C	1.05
Viscosity at 80°C (cps)	300 - 500
Colour	Clear, light amber

Mixing and Curing Conditions

		EMP97A / MOCA
Erapol EMP97A	(pph)	100
MOCA level	(pph)	17.0
Recommended % Theory		95
Erapol Temperature	(°C)	80 - 85
Curative Temperature	(°C)	110 - 120
Pot Life	(mins)	7
Cure at 100°C	(hrs)	2
Post Cure Time at 100°C	(hrs)	1
Post Cure Time at 70°C	(hrs)	8

All results are based on 100 grams of **Erapol EMP97A** at 97°C.



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

		EMP97A/MOCA	TEST METHOD
Hardness	(Shore A)	95 ± 3	AS1683.15
Tensile Strength	MPa (psi)	37.9 (5500)	AS1683.11
100% Modulus	MPa (psi)	9.6 (1400)	AS1683.11
300% Modulus	MPa (psi)	17.9 (2600)	AS1683.11
Angle Tear Strength, Die C	(kN/m)	97	AS1683.12
Elongation	(%)	400	AS1683.11
Compression Set / 22 hr at 70°C	(%)	42	AS1683.13
Cured Specific Gravity	(g/cm ³)	1.10	AS1683.4

Processing Procedure

1. **Erapol EMP97A** should be heated to 80-85°C and thoroughly degassed at approximately -95kpa of vacuum until excessive foaming stops.
2. The curative should be added to **Erapol EMP97A**, 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 **Erapol EMP97A/MOCA** or **Erapol EMP97A/Ethacure 300** into moulds that have been preheated at 80 -100°C and precoated 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.



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