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Erapol CCM40A

MEDIUM PERFORMANCE POLYETHER BASED
POLYURETHANE ELASTOMER

TECHNICAL DATASHEET

Erapol CCM40A is a medium performance cold castable polyurethane elastomer. The product is free from MOCA (methylene-bis-orthochloroaniline) and flammable solvents that produce an economical elastomer with outstanding elongation.

It offers advantages in that it can be readily processed and cured at room or elevated temperatures. The convenient mix ratio and low viscosity allow easy processing.

Applications and uses include: Flexible moulds for concrete and concrete stamp pads and ceramic mouldings, soft sound absorbing mats.

Product Specifications

	ISOCYANATE PREPOLYMER (A)	POLYOL CURATIVE (B)
Specific Gravity @ 25°C	1.02	1.2
Viscosity @ 25°C (cps)	9,800 – 10,200	120 – 160
% NCO	6.00 – 6.50	-

Mixing and Curing Conditions

Isocyanate Prepolymer (A)	(pbw)	100
Polyol Curative (B)	(pbw)	80
Prepolymer (A) Temperature	(°C)	20 – 30
Curative (B) Temperature	(°C)	20 – 30
Mixed Viscosity @ 25°C	(cps)	2300
Pot Life @ 25°C	(mins)	15 – 20
Cure @ 25°C	36 hours will result in an 80% cure. Fully cures after 7 days. (Cure temperature may increase to 80°C where full cure is reached after 12 -14 hours.)	

* Based on a 200 grams sample



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.

		CCM40A	TEST METHOD
Hardness	(Shore A)	40 ± 5	AS1683.15
Tensile Strength	(MPa)	18	AS1683.11
Elongation	(%)	580	AS1683.11
Rebound Resilience	(%)	50	DIN 53512
Abrasion Resistance	(mm ³)	205	AS1683.21
Cured Specific Gravity	(g/cm ³)	1.10	AS1683.4
Linear Shrinkage @ 23°C (500mm length x 46mm width x 16 mm thick)	(%)	0.4	

Erapol CCM40A can be mixed by hand or readily processed through suitable polyurethane dispensing equipment.

NOTE: Both Part A and B components are moisture sensitive. Once opened, containers should be purged with nitrogen, if they are to be stored for a period of time.

Processing Procedure

1. **Erapol CCM40A** Part A should be heated to 30°C and thoroughly degassed at -95 kPa of vacuum until excessive foaming stops.
2. The Part B (Curative) should be added to Part A (Prepolymer) and processed at room temperature. After adding the curative, mix thoroughly, being careful not to introduce air into the mixture.
3. Pour mixed Erapol CCM40A into moulds that have been precoated with Erlease Classic (release agent).

Handling Precautions

Erapol CCM40A Part A contains a small amount 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.

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