

Erapol CC80A

HIGH PERFORMANCE COLD CASTABLE
URETHANE ELASTOMER

TECHNICAL DATASHEET

Erapol CC80A is a high performance cold castable polyurethane elastomer. The product is free from MOCA (methylene-bis-orthochloroaniline) and flammable solvents, which produces an elastomer with outstanding toughness excellent abrasion resistance and high chemical resistance.

It offers advantages in that it can be readily processed and cured at room temperature. The convenient mix ratio and low viscosity allow easy processing. Applications and uses include: Flexible moulds for concrete, concrete stamp pads, cast in place liners, shock and sound dampening pads, impellers and belts.

Product Specifications

	ISOCYANATE PREPOLYMER (A)	POLYOL CURATIVE (B)	
Specific Gravity @ 25°C	1.08	1.01	
Viscosity @ 25°C (cps)	10,300 – 10,700	1000 - 1200	
Appearance	Clear, Light Amber	Brownish / Green	

Mixing and Curing Conditions

Isocyanate Prepolymer (A)	(pbw)	100	
Polyol Curative (B)	(pbw)	45	
Prepolymer (A) Temperature	(°C)	25 – 30	
Curative (B) Temperature	(°C)	25 – 30	
Mixed Viscosity @ 25°C	(cps)	5200	
Pot Life @ 25°C	(mins)	15 – 18	
Recommended Cure		24hrs at 25° C will result in an 80% cure. Fully cured at 7 days at 25° C. Alternatively a 70°C cure for 4-6hrs will result in 80% cure	



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.

Version 1 Date of Issue: 10 August 2012 Page 1 of 2



Physical Properties

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

		CC80A	TEST METHOD
Hardness	(Shore A)	80 ± 3	AS1683.15
Tensile Strength	(MPa)	28	AS1683.11
Elongation	(%)	510	AS1683.11
Rebound Resilience	(%)	45	DIN 53512
Abrasion Loss	(mm³)	70	AS1683.21
Cured Specific Gravity	(g/cm ³)	1.10	AS1683.4
Linear Shrinkage @ 23°C	(%)	0.2	
(500mm length x 46mm wide	th x 16 mm thick)	0.2	

Erapol CC80A 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. Part B must be thoroughly **MIXED** before use.

The Part A can solidify at temperatures below 15°C. If this occurs you need to warm the Part A component to approximately 50°C, then allow cooling to 25°C in order to liquefy before processing.

Processing Procedure

- 1. Carefully weigh the correct proportions of the two components together in one container, mix thoroughly. Be careful not to entrap air whilst mixing.
- 2. Pour the mixed material into moulds that have been prepared with release agent, being careful to avoid trapping air.
- 3. Allow casting to cure before demoulding.

Handling Precautions

Erapol CC80A 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.



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.

Version 1 Date of Issue: 10 August 2012 Page 2 of 2