



**Era Polymers Pty. Ltd.**  
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## Erapol CC60D

HIGH PERFORMANCE COLD CASTABLE URETHANE  
ELASTOMER

### TECHNICAL DATASHEET

**Erapol CC60D** is a premium grade cold castable polyurethane elastomer. The product is free from MOCA (methylene-bis-orthochloroaniline) and flammable solvents, which produces an elastomer with outstanding toughness, high elongation, and excellent tear strength and abrasion resistance.

It offers advantages in that it can be readily processed and cured at room or elevated temperatures.

### Application

Applications and uses include: moulds, drop hammer faces, metal forming pads, core box liners and foundry patterns.

### Product Specifications

	ISOCYANATE PREPOLYMER (A)	POLYOL CURATIVE (B)
Specific Gravity @ 25°C	1.07	1.2
Viscosity @ 25°C (cps)	10,300 – 10,700	400 - 440
Appearance	Clear, Light Amber	Clear, Light Green

### Mixing and Curing Conditions

Isocyanate Prepolymer (A)	(pbw)	100
Polyol Curative (B)	(pbw)	16.5
Prepolymer (A) Temperature	(°C)	25 – 30
Curative (B) Temperature	(°C)	25 – 30
Mix time	(mins)	2 - 3
Mixed Viscosity @ 25°C	(cps)	4500
Pot Life @ 25°C	(mins)	6 - 7
Demould time @ 25°C	(hrs)	6 - 8
Demould time @ 70°C	(hrs)	2
Recommended Cure Time	24 hours at 25° C will result in an 80% cure. Fully cured at 7 days at 20° C or a post cure for 4-6 hours at 70° 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.

		CC60D	TEST METHOD
<b>Hardness</b>	(Shore D)	60 ± 3	AS1683.15
<b>Tensile Strength</b>	(MPa)	50	AS1683.11
<b>Elongation</b>	(%)	250	AS1683.11
<b>Rebound Resilience</b>	(%)	35	DIN 53512
<b>Abrasion Resistance</b>	(mm <sup>3</sup> )	96	AS1683.21
<b>Cured Specific Gravity</b>	(g/cm <sup>3</sup> )	1.10	AS1683.4
<b>Linear Shrinkage @ 23°C (500mm length x 46mm width x 16 mm thick)</b>	(%)	0.2	

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.

Below 15°C Part A will appear as a white wax like substance. The Part A can be melted by placing the can in a bath of hot water for 15-30 minutes. Care should be exercised in keeping moisture away from the Part A.

## 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 sufficiently before demoulding.

## 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 recommendations to improve adhesion.

## Handling Precautions

**Erapol CC60D** Part A 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. 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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