

# **Erapol CC5/65**

HIGH PERFORMANCE COLD CASTABLE
URETHANE ELASTOMER

### **TECHNICAL DATASHEET**

**Erapol CC5/65** is a premium grade polyether (PTMEG) based cold castable polyurethane elastomer. The product is free from MOCA (methylene bis-ortho chloroaniline) and flammable solvents, which produces an elastomer with outstanding toughness, high elongation and abrasion resistance.

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 for easy processing.

# **Application**

Applications and uses include: Flexible moulds for concrete, concrete stamp pads, cast in place liners, shock and sound dampening pads.

### **Product Specification**

	ISOCYANATE PREPOLYMER (A)	POLYOL CURATIVE (B)	
% NCO	6.25 ± 0.25	///////////// -	
Specific Gravity at 25°C	1.07	1.04 90 – 130	
Viscosity at 25°C (cps)	10,300 – 10,700		
Appearance	Clear	Clear, light amber	



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: 22 October 2012 Page 1 of 3



# **Mixing and Curing Conditions**

Isocyanate Prepolymer (A)	(pbw)	100	
Polyol Curative (B)	(pbw)	100	
Recommended % Theory		0.95	
<b>Erapol Temperature</b>	(°C)	25 – 30	
<b>Curative Temperature</b>	(°C)	25 – 30	
Mixed Viscosity at 25°C (cps)		3500	
Mix Time	(mins)	2 - 3	
Pot Life at 25°C	(mins)	12 – 13	
Recommended	(hrs)	Minimum 24 hours at 25°C. Alternatively cure at 70°C for 6-8 hrs for full cure.	

**NOTE** 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.

THE PART B MUST BE THOROUGHLY MIXED BEFORE DECANTING.

# **Physical Properties**

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

		CC5/65	TEST METHOD
Hardness	(Shore A)	60 ± 5	AS1683.15
Tensile Strength	MPa (psi)	16 (2321)	AS1683.11
Elongation	(%)	600	AS1683.11
DIN Resilience	(%)	55	DIN 53512
DIN Abrasion Resistance 10N	(mm³)	135	AS1683.21
<b>Cured Specific Gravity</b>	(g/cm³)	1.10	AS1683.4
Linear Shrinkage @ 23°C (%) (500mm length x 46mm width x 16mm thick)		0.2	-



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: 22 October 2012 Page 2 of 3



# **Processing Procedure**

- 1. The part B must be thoroughly mixed before decanting.
- 2. Carefully weigh the correct proportions of the two components together in one container, mix thoroughly. Be careful not to entrap air whilst mixing.
- 3. Pour the mixed material into moulds that have been pre-coated with release agent, being careful to avoid trapping air.
- 4. Allow casting to cure 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 CC5/65** 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.



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: 22 October 2012 Page 3 of 3