



Era Polymers Pty. Ltd.
25-27 Green Street, Banksmeadow
Sydney, NSW 2019
AUSTRALIA
www.erapol.com.au

Eracast RT90A

MEDIUM PERFORMANCE POLYETHER URETHANE
ELASTOMER

TECHNICAL DATASHEET

Eracast RT90A is a medium performance cold castable polyurethane elastomer. The product is free from MOCA (methylene-bis-ortho-chloroaniline) and flammable solvents, which produces an economical elastomer with good toughness and high elongation and good chemical 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 easy processing.

Applications

Flexible moulds, concrete moulds and stamp pads, cast in place linings, sound dampening applications and casters.

Product Specifications

	ISOCYANATE PREPOLYMER (A)	POLYOL CURATIVE (B)
Specific Gravity at 25°C	1.02	1.2
Viscosity at 25°C (cps)	4800 – 5200	500 - 540
Appearance	Clear, Light Amber	Clear, Amber

Mixing and Curing Conditions

Isocyanate Prepolymer (A)	(pbw)	100
Polyol Curative (B)	(pbw)	20
Prepolymer (A) Temperature	(°C)	25 – 30
Curative (B) Temperature	(°C)	25 – 30
Mixed Viscosity at 25°C	(cps)	2000 - 3000
Pot Life at 25°C	(mins)	8 – 14



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.

		RT90A	TEST METHOD
Hardness	(Shore A)	90 ± 3	AS1683.15
Tensile Strength	(MPa)	14	AS1683.11
Angle Tear Strength, Die C	(kN/m)	23	AS1683.12
Elongation	(%)	450	AS1683.11
Rebound Resilience	(%)	41	DIN 53512
Abrasion Resistance	(mm ³)	196	AS1683.21
Cured Specific Gravity	(g/cm ³)	1.12	AS1683.4
Linear Shrinkage @ 23°C (500mm length x 46mm width x 16 mm thick)	(%)	0.2	

Processing Procedure

1. **Erapol RT90A** Part A should be heated to 30°C (the temperature may be increased to a maximum of 80°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 RT90A** into moulds, which have been pre-coated with Erlease (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 recommendations to improve adhesion.

Handling Precautions

Erapol RT90A 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.

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.