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## Eracast RT80A

MEDIUM PERFORMANCE POLYETHER URETHANE  
ELASTOMER

### TECHNICAL DATASHEET

**Eracast RT80A** is a medium performance cold castable polyurethane elastomer. The product is free from MOCA (methylene-bis-orthochloroaniline) 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	1.08	1.01
Viscosity at 25°C (cps)	4800 – 5200	240 - 280
Appearance	Clear, Light Amber	Clear, Amber

### Mixing and Curing Conditions

Isocyanate Prepolymer (A)	(pbw)	100
Polyol Curative (B)	(pbw)	35
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)	10 – 15
Cure at 25°C	24hrs at 25°C will result in an 80% cure. Fully cured at 7 days at 20°C. Alternatively a 70°C cure for 4-6hrs will result in 80% cure	

\*Results based on a 200g mixed 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

The properties presented below are an average based on several determinations and should not be used for specification purposes.

		RT80A	TEST METHOD
<b>Hardness</b>	(Shore A)	80 ± 3	AS1683.15
<b>Tensile Strength</b>	(MPa)	10.4	AS1683.11
<b>Elongation</b>	(%)	850	AS1683.11
<b>Rebound Resilience</b>	(%)	47	DIN 53512
<b>Abrasion Resistance</b>	(mm <sup>3</sup> )	268	AS1683.21
<b>Cured Specific Gravity</b>	(g/cm <sup>3</sup> )	1.09	AS1683.4
<b>Linear Shrinkage at 23°C (500mm length x 46mm width x 16 mm thick)</b>	(%)	0.2	

**Eracast RT80A** 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. 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

**Eracast RT80A** 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.