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AUSTRALIA
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Eracast RT70A

MEDIUM PERFORMANCE POLYETHER URETHANE ELASTOMER

TECHNICAL DATASHEET

Eracast RT70A 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 @ 25°C	1.02	1.04
Viscosity @ 25°C (cps)	4700 – 5300	360 - 600
Appearance	Clear, Light Amber	Clear, Amber

Mixing and Curing Conditions

Isocyanate Prepolymer (A)	(pbw)	100
Polyol Curative (B)	(pbw)	65
Prepolymer (A) Temperature	(°C)	25 – 30
Curative (B) Temperature	(°C)	25 – 30
Mixed Viscosity @ 25°C	(cps)	2000 - 4000
Pot Life @ 25°C	(mins)	12 – 18
Cure @ 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

* Based on a 200 grams sample

Physical Properties

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

		RT70A	TEST METHOD
Hardness	(Shore A)	70 ± 4	AS1683.15
Tensile Strength	(MPa)	13	AS1683.11
Elongation	(%)	910	AS1683.11
Rebound Resilience	(%)	57	DIN 53512
Abrasion Resistance	(mm^3)	130	AS1683.21
Cured Specific Gravity	(g/cm^3)	1.08	AS1683.4
Linear Shrinkage @ 23°C (500mm length x 46mm width x 16 mm thick)	(%)	0.1	

Eracast RT70A 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 RT70A 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.