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Eracast RT301A

TDI POLYETHER MOULDING MATERIAL

TECHNICAL DATASHEET

Eracast RT301A is a medium performance cold castable polyurethane elastomer. The product is free from MOCA (methylene-bis-ortho-chloroaniline) and flammable solvents.

It offers advantages in that it can be readily processed and cured at room or elevated temperatures. The low viscosity allows easy processing.

Application

Applications and uses include: flexible moulds and other flexible urethane applications.

Product Specification

	PART A	PART B
Specific Gravity at 25°C	1.08	1.02
Viscosity at 25°C (cPs)	4700 - 5300	300 - 400
Colour	Clear, straw liquid	Amber liquid

Mixing and Curing Conditions

		RT301A
Part A	(pph)	100
Part B	(pph)	110
Mix ratio by volume (A/B)		1/1
Recommended % Theory		95
Erapol Temperature	(°C)	20 - 30
Curative Temperature	(°C)	20 - 30
Initial mixed viscosity	(cps)	3000
Pot Life*	(mins)	13 - 17
Post Cure Time at 25°C	(hrs)	24

*The above results are based on 200 grams of mixed sample at 25°C.

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.

		RT301A
Hardness	(Shore A)	30 ± 3
Tensile Strength	MPa (psi)	2.7
100% Modulus	MPa (psi)	1.1
300% Modulus	MPa (psi)	1.5
Elongation	(%)	> 2200
Angle Tear Strength, Die C	(kN/m)	19.8
Trouser Tear Strength	(kN/m)	8.8
DIN Resilience	(%)	49
Cured Specific Gravity	(g/cm ³)	1.06

Processing Procedure

Eracast RT301A products can be processed by hand or machine dispensing equipment. Do not cast this material when the Part A or Part B temperature is below 20°C as it will take too long to cure.

NOTE: Both Part A and Part B components are moisture sensitive. Once opened, containers should be purged with nitrogen, if they are to be stored for a period of time.

The Part B (curative) should be mechanically mixed for a minimum of 30 minutes as it contains polyols and catalysts. If a pre-weighted kit is not used, a set of accurate scales should be used and a mixing container to weight the isocyanate and then the polyol.

The product when cast should not be moved until completely dry and the end user must consider when this will occur – before commencing a job a small test to check cure conditions may be needed -refer to Era Polymer.

Handling Precautions

Eracast RT301A should be used in well-ventilated area. Avoid breathing in vapours and protect skin and eyes from contact. Before using this product refer to MSDS.

In case of skin contact 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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