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Eratrowel 83A

TROWELLABLE POLYETHER BASED
 POLYURETHANE REPAIR COMPOUND

TECHNICAL DATASHEET

ERATROWEL 83A is a three-component cold trowellable polyurethane repair system. It produces an elastomeric material with superior properties such as excellent toughness, tensile strength and abrasion resistance. The mixed material shows very good anti sag properties, hence application to vertical surfaces is possible.

Application

The material has been designed with a long working life and is primarily used for repair of various types of urethane parts and other components. It can also be used as a sealant or lining material for pumps as well as for other high stress engineering applications. It is also being used as a repair compound for damaged conveyor belts in the rubber industry.

Product Specification

	ISOCYANATE PREPOLYMER (A)	POLYOL CURATIVE (B)	POLYOL CURATIVE (C)
Specific Gravity at 25°C	1.08	1.79	1.04 – 1.06
Viscosity at 25°C (cps)	10,000 – 11,000	3000 – 4000	Thin liquid
Appearance	Clear viscous liquid	Yellow liquid	Water clear liquid

Mixing and Curing Conditions

Isocyanate Prepolymer (A)	(pbw)	100
Polyol Curative (B)	(pbw)	60
Polyol Curative (C)	(pbw)	2.2
Erapol Temperature (A)	(°C)	25
Curative Temperature (B)	(°C)	25
Curative Temperature (C)	(°C)	25
Pot Life	(mins)	20 – 25
Cure at 25°C	(hrs)	24
Full Cure at 25°C	(days)	7

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 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

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

		Eratrowel 83A	TEST METHOD
Hardness	(Shore A)	83 ± 5	AS1683.15
Tensile Strength	(MPa)	23	AS1683.11
100% Modulus	(MPa)	5.8	AS1683.11
Angle Tear Strength, Die C	(kN/m)	79	AS1683.12
Trouser Tear Strength	(kN/m)	48	AS1683.12
Elongation	(%)	405	AS1683.11
Cured Specific Gravity	(g/cm ³)	1.17	AS1683.4

NOTE: All Part A, Part B and Part C 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. Mechanically stir **Part B-polyol** to ensure the material is well mixed.
2. Weigh correct amount of **Part B** into **Part A**, and thoroughly mix. Be careful not to entrap air whilst mixing. Thoroughly mix the two components for 2-3 minutes scraping around the sides of the **Part A** mixing container to ensure that the materials are mixed well.
3. Add the **Part C** into the mixed **Part A** and **Part B** mixture. Mix the **Part C** immediately, for 2-3 minutes. Addition of the **Part C** will turn the material into a thixotropic paste. Ensure that you continue to mix for at least 2-3 minutes again to ensure that the material is mixed well.
4. **ERATROWEL 83A** is designed to be applied from 0.5 mm to 2 mm in thickness.

NOTE: If Part A should solidify in the cold weather (below 15-20°C), it can be warmed to 50°C to liquefy. Allow cooling to ambient temperature before processing.

Handling Precautions

ERATROWEL 83A should be used in well-ventilated area. Avoid breathing in vapours and protect skin and eyes from contact.

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.

Packaging

ERATROWEL 83A is sold as three components, Part A, Part B and Part C where the total weight of the kit is 1 kg.

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