

JACOBSON PM87 (Natural) Provisional Technical Datasheet

Introduction

PM87 is a ricinoleate based blend which when reacted with System 100 Isocyanate forms an 85-90 Shore A elastomer. When mixed, this system gives low viscosity, extended pot-life and low levels of shrinkage. The ricinoleate chemistry utilised gives a high degree of tolerance to moisture during the curing stage making this system particularly suitable for use in the production of master patterns.

Advantages

- Long pot-life.
- Excellent ambient temperature curing characteristics.
- Low shrinkage.
- Low sensitivity to moisture during curing.
- Easily pigmentable.

Applications

- Master patterns.
- General purpose casting applications where long pot-life, low shrinkage and insensitivity to moisture are required.

Product data

Property	Unit	Polyol	Isocyanate
Appearance	Visual	Off-White	Brown
Viscosity at 25°C	cPs	2500-3500	150-250
Density	g/cm ³	1.34-1.40	1.20-1.24
Mix ratio Parts by weight			
Polyol		4.40	
Isocyanate		1.00	

Pre-Mixing Instructions

It is important to check the PM87 Polyol component for signs of filler settlement prior to use. If filler settlement is evident then the material must be mixed until homogenous. The System 100 Isocyanate component requires no pre-mixing.

Application

Polyol and isocyanate components should be processed at a working temperature of 20-30°C. This system has been developed for use at typical ambient temperature conditions and shouldn't need any elevated temperature post cure. If in any doubt please consult Jacobson's Technical Department.

Typical Properties

Resin/Hardener mix:	Unit	Material
Appearance	Visual	Off-White
Viscosity at 25°C	cPs	2200-3200
Pot life at 25°C	mins	45-60 mins

Cured Properties

PM87 will cure at typical ambient temperature and can be expected to reach full cure after 3-7 days depending upon ambient temperature.

Property	Value
Hardness Shore A Iso 868	85-90
Angle Tear Strength N/mm Iso 34-1:2010	15-20
Tensile Strength MPa Iso 37	4-6
Elongation at Break % Iso 37	60-100

Working Conditions

Normal polyurethane processing conditions should be applied. Ideal ambient temperature range 20-30°C

Storage

The polyol and isocyanate described in this instruction sheet have six-month shelf lives provided they are stored at 15 - 30°C in a dry place, out of direct sunlight and in suitable sealed containers, preferably those in which they are supplied. Below 15°C the Isocyanate component may show signs of crystallisation. If this occurs please consult Jacobson's Technical Department. Exposure to moisture in the atmosphere should be minimised. Excessive moisture absorption can lead to problems with foaming.

Handling precautions

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For further questions relating to processing and application, please contact our technical department.

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