

## NEUTHANE 802MM Series

MDI – Ester Quasi Systems (30-55 Shore A)

Published November 2023 Version 4

The NEUTHANE 802MM series are high performance MDI – Ester quasi systems designed to produce items for use in the concrete moulding industry.

- A high level of physical properties
- Excellent tear and rear propagation characteristics
- Good hydrolysis resistance
- Higher levels of physical properties at low end of the hardness range
- Low process and mould temperatures
- Rapid demould

### Typical Applications

Moulds for the concrete industry

**Processing** can be carried out by hand or by dispensing machine

- Avoid moisture contamination of all materials
- Part used containers should be flushed with dry nitrogen and resealed immediately after use
- It is vital to ensure that both components are completely liquid and thoroughly mixed prior to use
- Due to the exothermic nature of the system larger mixes will have a shorter pot life

#### Hand Processing

1. Melt ISOBB component at 40-50°C, POLYOL component at 50-60°C
2. Warm plasticiser to 40-50°C
3. Ensure components are completely liquid and thoroughly mixed prior to use.
4. Bring all components to the recommended process temperature
5. Add pigments and Antifoam (as applicable) to the polyol whilst mixing. Make sure pigment does not contain water
6. It is highly recommended that air be removed from the ISOBB component under vacuum prior to addition of the curative
7. Add all components and thoroughly mix ensuring that no unmixed material is left on the container sides (if necessary, the mix can be transferred to a second clean container and mixed again)
8. Remove air under vacuum
9. Cast into moulds, preheated to the recommended temperature
10. Cure as recommended

## NEUTHANE 802MM Series MDI - Ester Quasi System (30A – 55A)

NEUTHANE GRADE		30A	35A	40A	55A
Mix Ratio NEUTHANE 802ISOBB	by weight	100	100	100	100
Mix Ratio NEUTHANE 802POLYMM	by weight	405	405	405	405
Mix Ratio NEUTHANE PLAST 003	by weight	200	170	125	NA
NEUTHANE 802ISOBB Temperature	°C	45	45	45	45
NEUTHANE 802POLYMM Temperature	°C	55	55	55	55
NEUTHANE PLAST 003	°C	55	55	55	55
Recommended Mould Temperature	°C	40	40	40	40
Pot life – NEUTHANE CAT050 (0.3-1.0% wt. system)	seconds	90-120	90-120	90-120	90-120
Recommended Cure Temperature	°C	25	25	25	25
Typical Demould Time	Mins	45	45	45	45
Recommended Full Cure Time	days	7	7	7	7

Hardness	ISO 48-4	Shore A	30	35	40	55
	ISO 48-4	Shore D	-	-	-	-
100% Modulus	ISO 37	lb/in <sup>2</sup> (MPa)	68 (0.47)	80 (0.55)	91 (0.63)	168 (1.16)
300% Modulus	ISO 37	lb/in <sup>2</sup> (MPa)	114 (0.79)	140 (0.97)	160 (1.10)	273 (1.88)
Tensile Strength	ISO 37	lb/in <sup>2</sup> (MPa)	1490 (10.28)	1800 (12.41)	2300 (15.86)	3000 (20.69)
Elongation at Break	ISO 37	%	>900	>900	>900	>664
Tear (Die C)	ISO 34-1	lbf/in (kN/m)	100 (17.48)	110 (19.23)	121 (21.15)	148 (25.87)
Tear Trouser	ISO 34-1	lbf/in (kN/m)	31 (5.42)	34 (5.94)	37 (6.47)	40 (7.00)
Specific Gravity		g / cm <sup>3</sup>	1.21	1.21	1.21	1.21

Data above represents typical physical properties. Since conditions of use are beyond our control, no warranty is given or implied in respect of any recommendations or suggestions made by ourselves, nor is freedom from patent infringement inferred.  
 \*\*Data collected with NEUTHANE CAT053, please contact Notedome to request a suitable catalyst recommendation according to your application

