



Technical Data Sheet: Neuthane 3200 Series

MDI – Ester Rotational Casting Systems
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Neuthane 3200/765 - MDI - Ester Rotational Casting Systems (70 - 95 Shore A)

Properties			Processing			Special Considerations		
<p>The Neuthane 3200/765 series are high performance MDI – ester rotational casting systems designed to produce roller coverings for use in arduous application areas.</p> <p>They offer:</p> <ul style="list-style-type: none"> • a high level of physical properties • good dynamic performance • very good cut and abrasion resistance • very good chemical resistance • non MOCA curatives • no moulds for processing • room temperature curing <p>Typical Applications</p> <ul style="list-style-type: none"> • Steel mill rollers (dry applications) • paper mill rollers (dry applications) 			<p>Processing can be carried out by dispensing machine.</p> <p>Processing</p> <ul style="list-style-type: none"> • Melt prepolymer at 50-70°C for 12-24 hours • Heat the prepolymer and curative to the recommended temperature • Ensure that the curative is thoroughly mixed prior to use • Degas to remove air • Dispense at 700-2000g per minute* • Adjust rotation and traverse speed until a smooth build up is achieved* • Cure as recommended <p>*This will vary depending upon diameter of roller. As a general guide the output rate, rotational and traverse speeds will all increase as the diameter of the roller increases</p>			<p>Processing</p> <ul style="list-style-type: none"> • Avoid prolonged storage of prepolymers at elevated temperatures. This will result in low hardness and lower properties of the cured material • Avoid moisture contamination of all materials. • Part used containers should be flushed with dry nitrogen and resealed immediately after use • To prevent de-lamination, subsequent layers should be applied within 30 minutes • 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. <p>Alternatives</p> <ul style="list-style-type: none"> • Wet / Dynamic Applications - Neuthane 3100 [PTMEG ether] will offer improved performance 		
COST	PROCESSING	ABRASION	DYNAMIC	RESILIENCE	SOLVENT	HUMID/WET	TEMPERATURE	UV STABILITY
Key			Excellent / Good			Good / Average		
						Average / Poor		

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Neuthane		3200/765	3200/765	3200/765
Curative		3200/765	3200/765	3200/765
Mix Ratio: Curative per 100 Parts Resin	By weight	52.6	45.5	40.5
Resin Temperature	°C	75	75	75
Curative Temperature	°C	40	40	40
Recommended Roller Temperature	°C	Room Temperature	Room Temperature	Room Temperature
Viscosity @ 100°C resin (Viscosity vs. Temp Graphs available on request)	cps	800	800	800
Pot life – (on a 500 g mix)	seconds	20-30	20-30	20-30
Recommended Cure Temperature / Time	°C / hrs	Minimum 20/48	Minimum 20/48	Minimum 20/48

Hardness	DIN 2240-91	Shore A	70	75	80
	DIN 2240-91	Shore D	-	-	-
100% Modulus	BS 903 Pt A2 - ISO 37	lb/in ² (Mpa)	330 (2.3)	470 (3.2)	840 (5.8)
300% Modulus	BS 903 Pt A2 - ISO 37	lb/in ² (Mpa)	600 (4.10)	800 (5.5)	1180 (8.1)
Tensile Strength	BS 903 Pt A2 - ISO 37	lb/in ² (Mpa)	6300 (43.5)	6380 (44.0)	6900 (47.6)
Elongation at Break	BS 903 Pt A2 - ISO 37	%	600	600	550
Tear Strength	BS 903 Pt A3 -ISO 34-1	lb/in (KN/m)	300 (52.5)	350 (61.3)	410 (71.8)
Specific Gravity		g / cm ³	1.21	1.22	1.23

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.

Neuthane 3200/765 - MDI - Ester Rotational Casting Systems (70 - 95 Shore A)

Neuthane		3200/765	3200/765	3200/765
Curative		3270/765	3275/765	3280/765
Mix Ratio: Curative per 100 Parts Resin	By weight	52.6	45.5	40.5
Resin Temperature	°C	75	75	75
Curative Temperature	°C	40	40	40
Recommended Roller Temperature	°C	Room Temperature	Room Temperature	Room Temperature
Viscosity @ 100°C resin (Viscosity vs. Temp Graphs available on request)	cps	800	800	800
Pot life – (on a 500 g mix)	seconds	20-30	20-30	20-30
Recommended Cure Temperature / Time	°C / hrs	Minimum 20/48	Minimum 20/48	Minimum 20/48

Hardness	DIN 2240-91	Shore A	70	75	80
	DIN 2240-91	Shore D	-	-	-
100% Modulus	BS 903 Pt A2 - ISO 37	lb/in ² (Mpa)	330 (2.3)	470 (3.2)	840 (5.8)
300% Modulus	BS 903 Pt A2 - ISO 37	lb/in ² (Mpa)	600 (4.1)	800 (5.5)	1180 (8.1)
Tensile Strength	BS 903 Pt A2 - ISO 37	lb/in ² (Mpa)	6300 (43.5)	6380 (44.0)	6900 (47.6)
Elongation at Break	BS 903 Pt A2 - ISO 37	%	600	600	550
Tear Strength	BS 903 Pt A3 -ISO 34-1	lb/in (KN/m)	300 (52.5)	350 (61.3)	410 (71.8)
Specific Gravity		g / cm ³	1.21	1.22	1.23

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Neuthane		3200/765	3200/765	3200/765
Curative		3285/765	3290/765	3295/765
Mix Ratio: Curative per 100 Parts Resin	By weight	35.2	29.3	26.7
Resin Temperature	°C	75	75	75
Curative Temperature	°C	40	40	40
Recommended Roller Temperature	°C	Room Temperature	Room Temperature	Room Temperature
Viscosity @ 100°C resin (Viscosity vs. Temp Graphs available on request)	cps	800	800	800
Pot life – (on a 500 g mix)	seconds	20-30	15	15
Recommended Cure Temperature / Time	°C / hrs	Minimum 20/48	Minimum 20/48	Minimum 20/48

Hardness	DIN 2240-91	Shore A	85	90	95
	DIN 2240-91	Shore D	-	-	-
100% Modulus	BS 903 Pt A2 - ISO 37	lb/in ² (Mpa)	990 (6.8)	1200 (8.3)	1230 (8.5)
300% Modulus	BS 903 Pt A2 - ISO 37	lb/in ² (Mpa)	1480 (10.2)	1800 (12.4)	1850 (12.8)
Tensile Strength	BS 903 Pt A2 - ISO 37	lb/in ² (Mpa)	7500 (51.8)	7300 (50.4)	7500 (51.8)
Elongation at Break	BS 903 Pt A2 - ISO 37	%	550	550	500
Tear Strength	BS 903 Pt A3 -ISO 34-1	lb/in (KN/m)	480 (84.0)	500 (87.5)	550 (96.3)
Specific Gravity		g / cm ³	1.23	1.24	1.26

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