



DESMODUR® ML31XX + BAYTEC® XL AL905 (SD11-3)

90-95 Shore A

NATURE OF COMPONENTS		
Prepolymer nature	Nature of chain extender and other components	
MDI- Caprolactone	BAYTEC® XL AL905	Alcohol chain extender

CHARACTERISTICS OF COMPONENTS				
	Unit	DESMODUR® ML3182	DESMODUR® ML31106	BAYTEC® XL AL905
% NCO	%	8.2 (± 0.2)	10.6 (± 0.2)	-
Physical appearance at room temperature	-	solid	solid	solid
Processing temperature	°C	80	70	45
Viscosity at processing temperature	cps	1200	700	30
Specific gravity at processing temperature	-	1.12	1.12	1.01

ELASTOMER TYPICAL PROPERTIES (DATA GIVEN AS AN INDICATION)				
Prepolymer			DESMODUR® ML3182	DESMODUR® ML31106
Chain extender			BAYTEC® XL AL905	BAYTEC® XL AL905
Hardness at 23°C	ISO 48-4	Shore	90 A	95 A
10% Modulus	DIN 53504	MPa	2.9	5.0
100% Modulus	DIN 53504	MPa	7.9	11.9
200% Modulus	DIN 53504	MPa	12.6	18.6
300% Modulus	DIN 53504	MPa	20.9	30.4
Tensile strength	DIN 53504	MPa	55	50
Elongation	DIN 53504	%	450	430
Tear strength : without nick	ISO 34-1	kN/m	108	142
Tear strength : with nick	ISO 34-1	kN/m	49	82
Resilience	DIN 53512	%	45	36
Abrasion loss	ISO 4649	mm³	25	35
Compression set (deflection / 22 h / 70 °C)	ISO 815-1	%	20	23
Hardness at -5°C	ISO 48-4	Shore	93 A	97 A
Hardness at 80°C	ISO 48-4	Shore	85 A	92 A
Specific gravity			1.17	1.18

Depending on process conditions. curing and post curing temperature. hardness may vary from ± 2 Shore.

Labelling : This system data sheet is only valid in combination with the corresponding components current safety data sheets ! Any updating of safety relevant information – in accordance with EU directives – will only be reflected in the Safety Data Sheets. copies of which will be revised and distributed. For further technical information relating to safety, the Safety Data Sheets should be consulted.



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STORAGE AND USE PRECAUTIONS				
	Unit	DESMODUR® ML3182	DESMODUR® ML31106	BAYTEC® XL AL905
Optimal storage temperature of the drums	°C	< 30	< 30	< 30
Storage time (sealed drum)	Month	6	6	12
PREPARATION BEFORE PROCESSING				
Preheating time / preheating temperature	hr / °C	12 / 80	12 / 80	12 / 45
Homogenization before processing required	-	no	no	no
Degassing required	-	yes	yes	no

Keep from heat and protect against moisture.

PROCESSING				
Prepolymer		DESMODUR® ML3182	DESMODUR® ML31106	
Chain extender		BAYTEC® XL AL905	BAYTEC® XL AL905	
Hardness	Shore	90 A	95 A	
Prepolymer processing temperature	°C	80	70	
BAYTEC® XL AL905 processing temperature	°C	45	45	
Parts by weight of prepolymer		100	100	
Parts by weight of BAYTEC® XL AL905		8.6	11.1	
SD11-3 catalyst % / total (by weight), (catalyst at the head)		0.1	0.08	
MOLDING AND CURING				
Mold temperature	°C	100		
Pot life without catalyst (400g mixture)		4'	3'	
Demolding time without catalyst		60'	60'	
Pot life with SD11-3 catalyst (400g mixture) *	min	2'	2'	
Demolding time with SD11-3 catalyst	min	20'	20'	
Post-curing	hr - °C	16-100		

Use of degassing agent is recommended for hand casting.

* Possibility to shorten pot life by increasing the catalyst quantity.

A one week aging at room temperature is required to obtain the optimal properties of the elastomer.

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