DESMODUR® ML34XX + BAYTEC® XL AL905 (SD11-3) 80-95 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® ML3463	DESMODUR® ML3474	DESMODUR® ML3486	DESMODUR® ML3497	DESMODUR® ML34109	BAYTEC® XL AL905
% NCO	%	6.3 (± 0.2)	7.4 (± 0.2)	8.6 (± 0.2)	9.7 (± 0.2)	10.9 (± 0.2)	-
Physical appearance at room temperature	-	solid	solid	liquid	liquid	liquid	solid
Processing temperature	°C	80	80	80	80	70	45
Viscosity at processing temperature	cps	2000	1500	900	700	700	30
Specific gravity at processing temperature	-	1.11	1.12	1.12	1.12	1.13	1.01

ELASTOMER TYPICAL PROPERTIES (DATA GIVEN AS AN INDICATION)

Prepolymer			**DESMODUR® ML3463**	**DESMODUR® ML3474**	**DESMODUR® ML3486**	**DESMODUR® ML3497**	**DESMODUR® ML34109**
Chain extender			**BAYTEC® XL AL905**	**BAYTEC® XL AL905**	**BAYTEC® XL AL905**	**BAYTEC® XL AL905**	**BAYTEC® XL AL905**
Hardness at 23°C	**ISO 48-4**	**Shore**	**80 A**	**85 A**	**90 A**	**93 A**	**95 A**
10% Modulus	DIN 53504	MPa	1.5	2.2	2.9	4.3	4.8
100% Modulus	DIN 53504	MPa	4.7	6.2	7.5	9.9	12
200% Modulus	DIN 53504	MPa	7.4	9.2	11.7	13.9	18.7
300% Modulus	DIN 53504	MPa	12.5	15.4	20.0	20.0	30.0
Tensile strength	DIN 53504	MPa	50	50	50	50	48
Elongation	DIN 53504	%	440	440	440	440	415
Tear strength : without nick	ISO 34-1	kN/m	80	97	110	140	136
Tear strength : with nick	ISO 34-1	kN/m	30	38	49	70	75
Resilience	DIN 53512	%	59	58	54	52	40
Abrasion loss	ISO 4649	mm³	25	25	25	25	30
Compression set (deflection / 22 h / 70 °C)	ISO 815-1	%	22	25	23	22	20
Hardness at -5°C	ISO 48-4	Shore	83 A	88 A	93 A	95 A	97A
Hardness at 80°C	ISO 48-4	Shore	74 A	79 A	85 A	90 A	92 A
Specific gravity			1.14	1.15	1.17	1.08	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.

DESMODUR® ML34XX + BAYTEC® XL AL905 (SD11-3) 80-95 Shore A

STORAGE AND USE PRECAUTIONS							
	Unit	DESMODUR® ML3463	DESMODUR® ML3474	DESMODUR® ML3486	DESMODUR® ML3497	DESMODUR® ML34109	BAYTEC® XL AL905
Optimal storage temperature of the drums	°C	< 30	< 30	< 30	< 30	< 30	< 30
Storage time (sealed drum)	Month	12	12	12	12	12	12
Preheating time / preheating temperature	hr / °C	12/80	12/80	12/80	12/80	12/80	12/45
Homogenization before processing required	-	no	no	no	no	no	no
Degassing required	-	yes	yes	yes	yes	yes	yes

Keep from heat and protect against moisture.

PROCESSING						
Prepolymer		**DESMODUR® ML3463**	**DESMODUR® ML3474**	**DESMODUR® ML3486**	**DESMODUR® ML3497**	**DESMODUR® ML34109**
Chain extender		**BAYTEC® XL AL905**	**BAYTEC® XL AL905**	**BAYTEC® XL AL905**	**BAYTEC® XL AL905**	**BAYTEC® XL AL905**
Hardness	**Shore**	**80 A**	**85 A**	**90 A**	**93 A**	**95 A**
Prepolymer processing temperature	°C	80	80	80	80	70
BAYTEC® XL AL905 processing temperature	°C	45				
Parts by weight of prepolymer		**100**	**100**	**100**	**100**	**100**
Parts by weight of BAYTEC® XL AL905		**6.6**	**7.8**	**9**	**10.2**	**11.45**
SD11-3 catalyst % / total (by weight) (catalyst at the head)		**0.14**	**0.12**	**0.1**	**0.09**	**0.08**
MOLDING AND CURING						
Mold temperature	°C	110				
Pot life (400g mixture) *	min	3'30	3'30	2'30	2'30	2'15
Demolding time	min	30'	30'	20'	20'	20'
Post-curing	hr - °C	16 / 110				

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.