DESMODUR® MT21XX + BAYTEC® XL B (Catalyst D1-2)

75 to 95 Shore A

NATURE OF COMPONENTS

Prepolymer nature	Nature of chain extender and other components	
MDI - PTMEG	BAYTEC® XL B	Alcohol chain extender

CHARACTERISTICS OF COMPONENTS

	Unit	DESMODUR® MT2140	DESMODUR® MT2151	DESMODUR® MT2169	DESMODUR® MT2173	DESMODUR® MT2184	BAYTEC® XL B
% NCO	%	4.0 (± 0.2)	5.1 (± 0.2)	6.5 (± 0.2)	7.3 (± 0.2)	8 .6 (± 0.2)	-
Physical appearance at room temperature	-	solid	solid	solid	solid	solid	solid
Processing temperature	℃	80	80	80	80	80	45
Viscosity at processing temperature	cps	3400	2600	1400	1200	800	30
Specific gravity at processing temperature	-	1.01	1.02	1.03	1.03	1.03	1.01

ELASTOMER TYPICAL PROPERTIES (DATA GIVEN AS AN INDICATION)

Prepolymer			**DESMODUR® MT2140**	**DESMODUR® MT2151**	**DESMODUR® MT2169**	**DESMODUR® MT2173**	**DESMODUR® MT2184**
Chain extender			**BAYTEC® XL B**	**BAYTEC® XL B**	**BAYTEC® XL B**	**BAYTEC® XL B**	**BAYTEC® XL B**
Hardness at 20℃	**DIN 53505**	**Shore**	**75 A**	**80 A**	**85 A**	**90 A**	**95 A**
10% Modulus	DIN 53504	MPa	1.2	1.8	2.3	2.5	4.2
100% Modulus	DIN 53504	MPa	3.7	5.5	6.1	6.8	9.5
200% Modulus	DIN 53504	MPa	5.0	7.7	8.9	9.6	12.9
300% Modulus	DIN 53504	MPa	6.6	10.9	12.5	13.2	17.0
Tensile strength	DIN 53504	MPa	14	23	34	42	45
Elongation	DIN 53504	%	500	480	510	550	510
Tear strength : without nick	ISO 34-1	kN/m	51	59	75	103	111
Tear strength : with nick	ISO 34-1	kN/m	17	21	29	39	54
Resilience	DIN 53512	%	75	63	61	58	47
Abrasion loss	ISO 4649	mm³	40	30	30	30	30
Compression set (deflection / 22 h / 70 ℃)	ISO 815-1	%	10	13	17	18	20
Hardness at -5℃	DIN 53505	Shore	75 A	80 A	85 A	90 A	96 A
Hardness at 80℃	DIN 53505	Shore	75 A	80 A	85 A	88 A	94 A
Specific gravity			1.06	1.07	1.08	1.08	1.11

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® MT21XX + BAYTEC® XL B (Catalyst D1-2)

75 to 95 Shore A

STORAGE AND USE PRECAUTIONS							
	Unit	DESMODUR® MT2140	DESMODUR® MT2151	DESMODUR® MT2169	DESMODUR® MT2173	DESMODUR® MT2184	BAYTEC® XL B
Optimal storage temperature of the drums	℃	< 30	< 30	< 30	< 30	< 30	< 30
Storage time (sealed drum)	Month	6	6	6	6	6	12
PREPARATION BEFORE PROCESSING							
Preheating time / preheating temperature	hr / ℃	12 / 60					12 / 45
Homogenization before processing required	-	no	no	no	no	no	no
Degassing required	-	yes	yes	yes	yes	yes	no

Keep from heat and protect against moisture.

PROCESSING						
Prepolymer		DESMODUR® MT2140	DESMODUR® MT2151	DESMODUR® MT2169	DESMODUR® MT2173	DESMODUR® MT2184
Chain extender		BAYTEC® XL B	BAYTEC® XL B	BAYTEC® XL B	BAYTEC® XL B	BAYTEC® XL B
Hardness	**Shore**	**75 A**	**80 A**	**85 A**	**90 A**	**95 A**
Prepolymer processing temperature	℃	80				
BAYTEC® XL B processing temperature	℃	45				
Parts by weight of prepolymer		**100**	**100**	**100**	**100**	**100**
Parts by weight of BAYTEC® XL B		**4.1**	**5.2**	**6.6**	**7.4**	**8.8**
D1-2 % / total (by weight)		**0.02**	**0.03**	**0.04**	**0.04**	**0.05**
MOLDING AND CURING						
Mold temperature	℃	100				
Pot life without catalyst (400g mixture)	min	11’	7’30’’	6’	4’	3’
Pot life with D1-2 catalyst (400g mixture) *	min	5’	3’	2’	2’	1’30’’
Demolding time without catalyst	hr	2 h 30	2 h	1 h	1 h	1 h
Demolding time with D1-2 catalyst	min	60’	30’	20’	20’	5’
Post-curing	hr / ℃	16 / 100				

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

Use of degassing agent is recommended for hand casting.

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

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