



# DESMODUR® MD15120 +BAYTEC® D15 + BAYTEC® XL B

60 Shore A to 60 Shore D

NATURE OF COMPONENTS		
Prepolymer nature	Nature of chain extender and other components	
MDI - Ester	BAYTEC® D15	Ester polyol
	BAYTEC® XL B	Alcohol chain extender

CHARACTERISTICS OF COMPONENTS				
	Unit	DESMODUR® MD15120	BAYTEC®D15	BAYTEC® XL B
% NCO	%	10.70 (± 0.2)	-	-
Physical appearance at room temperature	-	solid	solid	solid
Processing temperature	°C	80	80	45
Viscosity at processing temperature	cps	700	390	30
Specific gravity at processing temperature	-	1.15	1.18	1.01

ELASTOMER TYPICAL PROPERTIES (DATA GIVEN AS AN INDICATION)											
Prepolymer	Chain extender	DIN 53505	Shore	DESMODUR® MD15120							
				BAYTEC® D15 + BAYTEC® XL B							
Hardness at 20°C			60 A	65 A	70 A	75 A	80 A	85 A	90 A	95 A	60 D
10% Modulus	DIN 53504	MPa	0.7	0.8	0.9	1.2	2.2	2.9	3.6	7.7	15.2
100% Modulus	DIN 53504	MPa	1.8	2.3	2.7	3.2	4.8	6.1	6.4	11.0	18.9
200% Modulus	DIN 53504	MPa	2.1	3.0	3.9	4.7	6.5	8.1	8.9	13.0	20.6
300% Modulus	DIN 53504	MPa	3.1	4.8	6.6	7.3	9.4	11.6	12.5	16.6	24.4
Tensile strength	DIN 53504	MPa	26	35	37	43	49	53	48	41	38
Elongation	DIN 53504	%	500	460	440	480	470	460	450	470	475
Tear strength : without nick	ISO 34-1	kN/m	34	42	49	62	84	96	104	140	203
Tear strength : with nick	ISO 34-1	kN/m	22	23	24	25	39	49	52	93	152
Resilience	DIN 53512	%	56	55	54	54	50	47	46	44	42
Abrasion loss	ISO 4649	mm³	30	30	30	30	30	30	30	30	40
Compression set (deflection / 22 h / 70 °C)	ISO 815-1	%	22	23	27	28	29	30	36	37	-
Hardness at -5°C	DIN 53505	Shore	65 A	69 A	75 A	80 A	87 A	91 A	94 A	97 A	65 D
Hardness at 80°C	DIN 53505	Shore	56 A	60 A	67 A	72 A	77 A	83 A	87 A	93 A	53 D
Specific gravity			1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20

**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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60 Shore A to 60 Shore D

STORAGE AND USE PRECAUTIONS				
	Unit	DESMODUR® MD15120	BAYTEC® D15	BAYTEC® XL B
Optimal storage temperature of the drums	°C	< 30	< 30	< 30
Storage time (sealed drum)	Month	6	12	12
PREPARATION BEFORE PROCESSING				
Preheating time / preheating temperature	hr / °C	24 / 70	24 / 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® MD15120								
Chain extender		BAYTEC® D15 + BAYTEC® XL B								
Hardness	Shore	60 A	65 A	70 A	75 A	80 A	85 A	90 A	95 A	60 D
Prepolymer processing temperature	°C	80								
BAYTEC® D15 processing temperature	°C	80								
BAYTEC® XL B processing temperature	°C	45								
Parts by weight of prepolymer		100	100	100	100	100	100	100	100	100
Parts by weight of BAYTEC® D15		105	95	85	75	65	55	50	30	5
Parts by weight of BAYTEC® XL B		1.8	2.7	3.6	4.5	5.4	6.3	6.7	8.5	10.8
MOLDING AND CURING										
Mold temperature	°C	100								
Pot life (400g mixture)	min	10'	7'30"	6'15"	6'	6'	4'30"	4'20"	2'20"	1'10"
Demolding time	min	60'	60'	60'	60'	45'	45'	30'	15'	15'
Post-curing	hr - °C	16 - 100								

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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