



# DESMODUR® LU-D + BAYTEC® XL 1705

## free TDI content < 0,1 % by weight

72 to 95 Shore A

NATURE OF COMPONENTS		
Prepolymer nature	Nature of chain extender and other components	
TDI-Ester	BAYTEC® XL 1705	Amine chain extender

CARACTERISTIQUES DES COMPOSANTS							
	Unit	DESMODUR® LU-D70 (*)	DESMODUR® LU-D80 (*)	DESMODUR® LU-D85	DESMODUR® LU-D90	DESMODUR® LU-D95	BAYTEC® XL 1705
% NCO	%	2.3 (± 0.2)	3.2 (± 0.2)	3.6 (± 0.2)	4.15 (± 0.2)	5.2 (± 0.2)	-
Physical appearance at room temperature	-	solid	solid	solid	solid	solid	liquid
Processing temperature	°C	80	80	80	80	80	30
Viscosity at processing temperature	cps	1200	600	850	750	550	300
Specific gravity at processing temperature	-	1.15	1.16	1.18	1.19	1.19	1.21

ELASTOMER TYPICAL PROPERTIES (DATA GIVEN AS AN INDICATION)							
Prepolymer			DESMODUR® LU-D70	DESMODUR® LU-D80	DESMODUR® LU-D85	DESMODUR® LU-D90	DESMODUR® LU-D95
Chain extender			BAYTEC® XL 1705	BAYTEC® XL 1705	BAYTEC® XL 1705	BAYTEC® XL 1705	BAYTEC® XL 1705
<b>Hardness at 23°C</b>	<b>ISO 48-4</b>	<b>Shore</b>	<b>72 A</b>	<b>80 A</b>	<b>85 A</b>	<b>90 A</b>	<b>95 A</b>
10% Modulus	DIN 53504	MPa	1.5	1.9	2.7	3.9	9.3
100% Modulus	DIN 53504	MPa	3.6	4.8	6.3	7.6	11.8
200% Modulus	DIN 53504	MPa	4.7	6.1	8.0	9.4	14.1
300% Modulus	DIN 53504	MPa	5.6	8.1	10.9	12.5	18.4
Tensile strength	DIN 53504	MPa	44	51	53	56	40
Elongation	DIN 53504	%	740	720	600	600	500
Tear strength : without nick	ISO 34-1	kN/m	73	93	108	113	139
Tear strength : with nick	ISO 34-1	kN/m	31	50	53	63	94
Resilience	DIN 53512	%	65	42	34	28	31
Abrasion loss	ISO 4649	mm³	50	55	60	65	65
Abrasion loss (with 0,3% AAA additive)			30	30	30	30	35
Compression set (deflection / 22 h / 70 °C)	ISO 815-1	%	30	36	32	35	38
Hardness at -5°C	ISO 48-4	Shore	80 A	87 A	93 A	97 A	66 D
Hardness at 80°C	ISO 48-4	Shore	74 A	78 A	85 A	89 A	94 A
Specific gravity			1.20	1.23	1.25	1.25	1.26

(\*) specific sales conditions.

Depending on process conditions, curing and post curing temperature, hardness may vary from ± 3 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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Covestro Elastomers SAS is certified ISO 9001 : 2008

Version

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STORAGE AND USE PRECAUTIONS							
	Unit	DESMODUR® LU-D70	DESMODUR® LU-D80	DESMODUR® LU-D85	DESMODUR® LU-D90	DESMODUR® LU-D95	BAYTEC® XL 1705
Optimal storage temperature of the drums	°C	< 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 / °C	48 / 70					-
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® LU-D70	DESMODUR® LU-D80	DESMODUR® LU-D85	DESMODUR® LU-D90	DESMODUR® LU-D95
Chain extender		BAYTEC® XL 1705	BAYTEC® XL 1705	BAYTEC® XL 1705	BAYTEC® XL 1705	BAYTEC® XL 1705
Hardness	Shore	72 A	80 A	85 A	90 A	95 A
Prepolymer processing temperature	°C	80				
BAYTEC® XL 1705 processing temperature	°C	30				
Parts by weight of prepolymer		100	100	100	100	100
Parts by weight of BAYTEC® XL 1705		5.6	7.7	8.7	10.0	12.6
MOLDING AND CURING						
Mold temperature	°C	90				
Pot life (400g mixture)	min	9'	7'	5'	4'15"	3'30"
Demolding time	min	30'	30'	20'	20'	20'
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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