



# DESMODUR® TT1xx + BAYTEC® XL1705

## free TDI content < 0,5 % by weight

80 Shore A to  
95 Shore A

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

CHARACTERISTICS OF COMPONENTS						
	Unit	DESMODUR® TT130	DESMODUR® TT142	DESMODUR® TT146	DESMODUR® TT160	BAYTEC® XL1705
% NCO	%	3.00 (± 0.1)	4.20 (± 0.2)	4.70 (± 0.2)	5.90 (± 0.2)	-
Physical appearance at room temperature	-	solid	liquid	solid	liquid	liquid
Processing temperature	°C	80	80	80	80	30
Viscosity at processing temperature	cps	1300	900	895	700	300
Specific gravity at processing temperature	-	1.01	1.01	1.04	1.03	1.21

ELASTOMER TYPICAL PROPERTIES (DATA GIVEN AS AN INDICATION)						
Prepolymer			DESMODUR® TT130	DESMODUR® TT142	DESMODUR® TT146	DESMODUR® TT160
Chain extender			BAYTEC® XL1705	BAYTEC® XL1705	BAYTEC® XL1705	BAYTEC® XL1705
Hardness at 23°C	ISO 48-4	Shore	80 A	87 A	90 A	95 A
10% Modulus	DIN 53504	MPa	1.7	3.0	3.3	7.9
100% Modulus	DIN 53504	MPa	4.7	8.5	9.4	17.4
200% Modulus	DIN 53504	MPa	6.4	12.1	13.0	24.5
300% Modulus	DIN 53504	MPa	8.1	18.6	18.8	36.4
Tensile strength	DIN 53504	MPa	29	47	40	54
Elongation	DIN 53504	%	560	400	420	385
Tear strength : without nick	ISO 34-1	kN/m	74	94	114	155
Tear strength : with nick	ISO 34-1	kN/m	23	30	42	68
Resilience	DIN 53512	%	67	50	42	40
Abrasion loss	ISO 4649	mm³	25	40	20	30
Compression set (deflection / 22 h / 70 °C)	ISO 815-1	%	27	37	36	23
Hardness at -5°C	ISO 48-4	Shore	82 A	88 A	96 A	60 D
Hardness at 80°C	ISO 48-4	Shore	79 A	86 A	89 A	95 A
Specific gravity			1.05	1.10	1.11	1.14

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® TT130	DESMODUR® TT142	DESMODUR® TT146	DESMODUR® TT160	BAYTEC® XL1705
Optimal storage temperature of the drums	°C	< 30	< 30	< 30	< 30	< 30
Storage time (sealed drum)	Month	12	12	12	12	12
PREPARATION BEFORE PROCESSING						
Preheating time / preheating temperature	hr / °C	12 / 60				-
Homogenization before processing required	-	no	no	no	no	no
Degassing required	-	yes	yes	yes	yes	no

Keep from heat and protect against moisture.

PROCESSING					
Prepolymer		DESMODUR®TT130	DESMODUR®TT142	DESMODUR® TT146	DESMODUR®TT160
Chain extender		BAYTEC® XL1705	BAYTEC® XL1705	BAYTEC® XL1705	BAYTEC® XL1705
Hardness	Shore	80 A	87 A	90 A	95 A
Prepolymer processing temperature	°C	80			
BAYTEC® XL1705 processing temperature	°C	30			
Parts by weight of prepolymer		100	100	100	100
Parts by weight of BAYTEC® XL1705		7.3	10.2	11.2	14.3
MOLDING AND CURING					
Mold temperature	°C	100			
Pot life (400g mixture)	min	9'	5'	5'	4'
Demolding time	min	45'	25'	25'	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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