



# DESMODUR® TD6400 + BAYTEC® XL TMP + PLASTICIZER V10 (Catalyst SD6-40)

20 to 58  
Shore A

NATURE OF COMPONENTS		
Prepolymer nature	Nature of chain extender and other components	
TDI - Ester	BAYTEC® XL TMP	Alcohol chain extender
	PLASTICIZER V10	Plasticizer

CHARACTERISTICS OF COMPONENTS				
	Unit	DESMODUR® TD6400	BAYTEC® XL TMP	PLASTICIZER V10
% NCO	%	4.25 (± 0.2)	-	
Physical appearance at room temperature	-	solid	solid	liquid
Processing temperature	°C	80	90	80
Viscosity at processing temperature	cps	2000	75	15
Specific gravity at processing temperature	-	1.19	1.05	0.98

ELASTOMER TYPICAL PROPERTIES (DATA GIVEN AS AN INDICATION)									
Prepolymer	DESMODUR® TD6400								
Chain extender	BAYTEC® XL TMP + PLASTICIZER V10 (Catalyst SD6-40)								
Hardness at 23°C	ISO 48-4	Shore	20A	35 A	40 A	45 A	50 A	55 A	58 A
10% Modulus	DIN 53504	MPa	0.1	0.2	0.2	0.3	0.4	0.5	0.6
100% Modulus	DIN 53504	MPa	0.4	1.0	1.2	1.3	1.8	2.1	2.5
200% Modulus	DIN 53504	MPa	0.7	1.6	1.8	2.2	2.8	3.4	3.9
300% Modulus	DIN 53504	MPa	1	2.4	3.0	3.5	4.5	5.5	6.8
Tensile strength	DIN 53504	MPa	4	13	20	24	28	34	40
Elongation	DIN 53504	%	510	460	460	440	420	420	400
Tear strength : without nick	ISO 34-1	kN/m	10	20	22	24	30	35	40
Tear strength : with nick	ISO 34-1	kN/m	2	5	6	6	7	8	9
Resilience	DIN 53512	%	36	29	25	22	14	11	9
Abrasion loss	ISO 815-1	mm³	-	> 200	200	150	120	100	80
Compression set (deflection / 22 h / 70 °C)	ISO 4649	%	4	4	4	4	4	4	4
Hardness at -5°C	ISO 48-4	Shore	43A	43 A	48 A	54 A	62 A	65 A	69 A
Hardness at 80°C	ISO 48-4	Shore	20A	35 A	40 A	45 A	50 A	55 A	58 A
Specific gravity			1.22	1.22	1.23	1.25	1.25	1.25	1.26

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® TD6400 + BAYTEC® XL TMP + PLASTICIZER V10 (Catalyst SD6-40)

20 to 58  
Shore A

STORAGE AND USE PRECAUTIONS				
	Unit	DESMODUR® TD6400	BAYTEC® XL TMP	PLASTICIZER V10
Optimal storage temperature of the drums	°C	< 30	< 30	< 30
Storage time (sealed drum)	Month	12	12	12
PREPARATION BEFORE PROCESSING				
Preheating time / preheating temperature	hr / °C	24 / 70	12 / 80	12 / 80
Homogenization before processing required	-	no	no	no
Degassing required	-	yes	no	no

Keep from heat and protect against moisture.

PROCESSING								
Prepolymer		DESMODUR® TD6400						
Chain extender		BAYTEC® XL TMP + PLASTICIZER V10 (Catalyst SD6-40)						
Hardness	Shore	20A	35 A	40 A	45 A	50 A	55 A	58 A
Prepolymer processing temperature	°C	80						
BAYTEC® XL TMP processing temperature	°C	90						
PLASTICIZER V 10 processing temperature	°C	80						
Parts by weight of prepolymer		100	100	100	100	100	100	100
Parts by weight of BAYTEC® XL TMP		4.1	4.3	4.3	4.3	4.3	4.3	4.3
Parts by weight of PLASTICIZER V10		65	35	28	20	10	5	-
Catalyst SD6-40 % / total (by weight) (catalyst at the head)		1.0	0.5	0.35	0.15	0.12	0.1	0.08
MOLDING AND CURING								
Mold temperature	°C	110						
Pot life (400g mixture with catalyst)* in a non heated pot	min	18'	18'	18'	15'	12'	12'	12'
Demolding time (with catalyst)	min	60'	60'	60'	60'	60'	60'	60'
Post-curing	hr / °C	16 / 110						

\* 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.

The following information and our technical advice – whether verbal, in writing or by way of trials – are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to check its validity and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our advice concerning safety does not release you from the obligation to determine the safety measures designed for your production environment, that we may not be able to anticipate, to check abilities and to inform the people who will use, handle or be in contact with these products.