



DESMODUR[®] MTX6076 + BAYTEC[®] T4X + BAYTEC[®] XL B (Catalyst CATD0812-3)

60 Shore A to
75 Shore D

NATURE OF COMPONENTS		
Prepolymer nature	Nature of chain extender and other components	
MDI - Ether	BAYTEC [®] T4X	Ether formulated polyol
	BAYTEC [®] XL B	Alcohol chain extender

CHARACTERISTICS OF COMPONENTS				
	Unit	DESMODUR [®] MTX6076	BAYTEC [®] T4X	BAYTEC [®] XL B
Physical appearance at room temperature	-	liquid	solid	solid
Processing temperature	°C	40	50	40
Viscosity at processing temperature	cps	210	1000	40
Specific gravity at processing temperature	-	1.18	0.98	1.01

ELASTOMER OPTIMAL PROPERTIES (DATA GIVEN AS AN INDICATION)															
Prepolymer	Chain extender		DESMODUR [®] MTX6076												
			BAYTEC [®] T4X + BAYTEC [®] XL B (Catalyst CATD0812-3)												
Hardness at 23°C	ISO 48-4	Shore	60 A	65 A	70 A	75 A	80 A	85 A	90 A	95 A / 50 D	55 D	60 D	65 D	70 D	75 D
10% Modulus	DIN 53504	MPa	0.5	0.9	1.0	1.5	2.1	2.4	3.7	5.6	8.9	13.9	19.4	27.2	34.9
100% Modulus	DIN 53504	MPa	1.9	2.4	3.3	4.7	5.9	6.6	8.6	11.6	14.2	20.2	23.4	28.3	33.2
200% Modulus	DIN 53504	MPa	2.3	3.2	4.9	6.9	8.6	9.8	12.6	16.2	19.4	24.5	27.5	31.2	34.9
300% Modulus	DIN 53504	MPa	2.9	4.3	7.1	10.6	13.2	15.7	19.7	24.0	27.8	31.6	34.7	38.0	41.3
Tensile strength	DIN 53504	MPa	22	34	40	45	45	50	50	50	50	45	45	44	42
Elongation	DIN 53504	%	590	580	510	490	480	480	480	470	460	410	410	350	310
Tear strength : without nick	ISO 34-1	kN/m	35	53	66	80	92	100	122	141	173	182	195	219	246
Tear strength : with nick	ISO 34-1	kN/m	12	19	20	22	28	32	45	61	89	131	151	164	181
Resilience	DIN 53512	%	74	73	68	55	45	43	42	40	42	45	46	50	48
Abrasion loss	ISO 4649	mm ³	40	35	35	35	35	35	40	40	50	60	80	80	80
Abrasion loss with 0,3% AAA additive	ISO 4649	mm ³	25	25	25	25	25	25	30	30	40	60	80	80	80
Compression set (deflexion / 22 h / 70 °C)	ISO 815-1	%	14	16	18	18	20	25	25	25	-	-	-	-	-
Hardness at -5°C	ISO 48-4	Shore	63 A	66 A	71 A	78 A	84 A	89 A	93 A	62 D	64 D	67 D	71 D	75 D	78 D
Hardness at 80°C	ISO 48-4	Shore	56 A	61 A	65 A	71 A	76 A	82 A	86 A	91 A	94 A	55D	57 D	63 D	70 D
Specific gravity			1.05	1.06	1.07	1.08	1.09	1.11	1.12	1.13	1.14	1.15	1.16	1.17	1.18

Depending on process conditions. curing and post curing temperature. hardness may vary from ± 2 Shore A.

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

05



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75 Shore D

STORAGE AND USE PRECAUTIONS				
	Unit	DESMODUR® MTX6076	BAYTEC® T4X	BAYTEC® XL B
Optimal storage temperature of the drums	°C	20 – 25	< 30	< 30
Storage time (sealed drum)	Month	4	12	12
PREPARATION BEFORE PROCESSING				
Preheating time / preheating temperature	hr / °C	16 / 70	12 / 60 *	12 / 45
Homogenization before processing required	-	no	no	no
Degassing required	-	yes	yes	no

Keep from heat and protect against moisture. * in case of unsolved particles after initial period, preheating can be prolonged up to 24hr (until 70°C)

Please refer to 'Handling and storage conditions' document

PROCESSING														
Prepolymer		DESMODUR® MTX6076												
Chain extender		BAYTEC® T4X + BAYTEC® XL B (Catalyst CATD0812-3)												
Hardness	Shore	60 A	65 A	70 A	75 A	80 A	85 A	90 A	95 A / 50 D	55 D	60 D	65 D	70 D	75 D
Prepolymer processing temperature	°C	40												
BAYTEC® T4X processing temperature	°C	50												
BAYTEC® XL B processing temperature	°C	40												
Parts by weight of prepolymer		100	100	100	100	100	100	100	100	100	100	100	100	100
Parts by weight of BAYTEC® T4X		330	280	230	190	165	150	130	110	90	70	60	50	40
Parts by weight of BAYTEC® XL B		9,3	11,6	13,8	15,6	16,7	17,4	18,3	19,2	20,1	21	21,5	21,9	22,4
CATD0812-3 % / total (by weight), (catalyst at the head)		0.40	0.30	0.30	0.30	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.30
AAA % / total (by weight), (additive at the head)		0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30

MOLDING AND CURING														
Mold temperature	°C	100								110				
Pot life (on 400gr mixture)*	min	4'	4'	4'	3'30"	4'	3'30'	3'	2'30"	2'	1'40"	1'40"	1'15"	1'15"
Pot life (in a heated sheet mold)*	min	3'30"	3'30"	3'20"	3'20"	3'30"	3'30"	2'45"	2'	1'40"	1'30"	1'30"	1'	1'
Demolding time	min	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'
Post-curing	hr - °C	16 / 100												

* Possibility to shorten or lengthen the pot life by increasing or decreasing the catalyst quantity. Please consult our Sales Department for additional information.

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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