



DESMODUR® MDQ75164+ BAYTEC® D75 + BAYTEC® XL AL32 (Catalyst SD25.1 or SD25.2-N)

55 Shore A
to 95 Shore A

NATURE OF COMPONENTS		
Prepolymer nature	Nature of chain extender and other components	
MDI - Ester	BAYTEC® D75	Ester formulated polyol
	BAYTEC® XL AL32	Alcohol chain extender

CHARACTERISTICS OF COMPONENTS				
	Unit	DESMODUR® MDQ75164	BAYTEC® D75	BAYTEC® XL AL32
% NCO	%	16.40 (± 0.2)	-	-
Physical appearance at room temperature	-	solid	solid	solid
Processing temperature	°C	40	70	40
Viscosity at processing temperature	cps	900	600	10
Specific gravity at processing temperature	-	1.17	1.16	1.10

ELASTOMER OPTIMAL PROPERTIES (DATA GIVEN AS AN INDICATION)											
Prepolymer	Chain extender		DESMODUR® MDQ75164								
			BAYTEC® D75 + BAYTEC® XL AL32								
Hardness at 23°C	ISO 48-4	Shore	55 A	60 A	65 A	70 A	75 A	80 A	85 A	90 A	95 A
10% Modulus	DIN 53504	MPa	0.4	0.6	0.7	1.1	1.4	1.7	2.5	3.2	5.5
100% Modulus	DIN 53504	MPa	1.9	2.3	2.7	3.4	4.2	5.2	7.1	8.2	11.3
200% Modulus	DIN 53504	MPa	2.5	3.2	4.1	5.1	6.5	8.0	10.6	11.9	14.9
300% Modulus	DIN 53504	MPa	3.2	4.6	6.4	8.5	10.7	12.8	16.3	17.8	20.1
Tensile strength	DIN 53504	MPa	48	58	57	60	58	56	51	51	39
Elongation at break	DIN 53504	%	670	670	630	640	650	660	620	640	580
Tear strength : without nick	ISO 34-1	kN/m	51	80	87	102	123	132	149	153	164
Tear strength : with nick	ISO 34-1	kN/m	40	51	53	58	58	61	68	70	81
Resilience	DIN 53512	%	58	58	57	53	51	50	46	44	41
Abrasion loss	ISO 4649	mm³	22	22	22	25	26	26	28	30	30
Abrasion loss with 0.3% AAA	ISO 4649	mm³	12	12	13	14	14	14	15	17	19
Compression set (22 h / 70 °C)	ISO 815-1	%	40	32	27	26	29	44	41	41	48
Hardness at -5°C	ISO 48-4	Shore	59 A	62 A	67 A	72 A	78 A	84 A	89 A	92 A	96 A
Hardness at 80°C	ISO 48-4	Shore	52 A	61 A	66 A	70 A	75 A	80 A	86 A	88 A	92 A
Specific gravity			1.24	1.24	1.24	1.24	1.24	1.25	1.26	1.26	1.26

Depending on process conditions, curing and post curing temperature, hardness may vary with a derivation of ± 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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Covestro Elastomers SAS is certified ISO 9001: 2008

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STORAGE AND USE PRECAUTIONS				
	Unit	DESMODUR® MDQ75164	BAYTEC® D75	BAYTEC® XL AL32
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	16 / 80 **	36 / 80	12 / 40
Homogenization before processing required	-	no	no	no
Degassing required	-	yes	yes	no

Keep from heat and protect against moisture.

** Preheating can be anticipated up to 48h in advance; prepolymer can be then stored in the workshop at ambient temperature or in the oven at 40°C (with XL AL32 drums).

PROCESSING										
Prepolymer		DESMODUR® MDQ75164								
Chain extender		BAYTEC® D75 + BAYTEC® XL AL32								
Hardness	Shore	55 A	60 A	65 A	70 A	75 A	80 A	85 A	90 A	95 A
Prepolymer processing temperature	°C	40								
BAYTEC® D75 processing temperature	°C	70								
BAYTEC® XL AL32 processing temperature	°C	40								
Parts by weight of prepolymer		100	100	100	100	100	100	100	100	100
Parts by weight of BAYTEC® D75		230	200	170	150	125	105	80	70	50
Parts by weight of BAYTEC® XL AL32		5.0	5.9	6.8	7.4	8.2	8.8	9.6	9.9	10.5
Or	Catalyst SD25.1 % / total (by weight) catalyst at the head	0.50	0.50	0.50	0.45	0.40	0.35	0.30	0.25	0.25
	Catalyst SD25.2-N % / total (by weight) catalyst at the head	0.35	0.35	0.35	0.30	0.30	0.30	0.25	0.20	0.20

MOLDING AND CURING										
Mold temperature	°C	85 – 100 ***								
Pot life (400g mixture in a non heated pot)	min	3'00"	4'15"	4'00"	3'30"	3'30"	3'15"	3'00"	2'50"	2'20"
Demolding time	min	30'	30'	30'	30'	30'	30'	30'	30'	30'
Post-curing	hr - °C	16 – 80 ***								

Depending on process conditions, curing and post curing temperature, hardness may vary with a derivation of ± 2 Shore.

*** For specific applications (optimisation of dynamical properties or massive parts), please consult our Sales Department for additional information on post-curing conditions.

A corresponding TDS without post-curing is also available in parallel. Use of degassing agent is recommended for hand casting.

A 1 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