

TECNOTHANE® wheels: Putting resilience to work

Our TECNOTHANE® engineering elastomers offer a low compression set and high rebound resilience – making them ideal for the manufacture of wheels and castors that need to carry heavy loads.

TECNOELASTOMERI
Engineering Urethane Elastomers

HUNTSMAN
Enriching lives through innovation

TECNOTHANE® wheels

Well equipped to handle the stresses and temperature variations of extreme operating conditions, our TECNOTHANE® elastomers can be found hard at work in factories and industrial environments, helping to ensure the trouble-free transportation and movement of raw materials and finished goods.



Technical properties

TYPICAL PHYSICAL PROPERTIES	UNIT	TEST METHOD	MDE SERIES 5	MPT	MPC	WRP*
Hardness	Sh	DIN 53505	92A	92A	92A	78A
Modulus 100%	MPa	DIN 53504	10	5	6	5
Modulus 300%	MPa	DIN 53504	20	14	16	10
Tensile strength	MPa	DIN 53504	50	40	53	24
Elongation at break	%	DIN 53504	500	480	650	330
Tear resistance, die B/a (90°, without nick)	kN/m	ISO 34-1	90	85	94	28
Tear resistance, die B/b (90°, with nick)	kN/m	ISO 34-1	48	40	55	10
Compression set at 70°C / 23h	%	ISO 815	25	18	20	15
Rebound resilience	%	ISO 4662	47	70	50	45
Abrasion resistance	mg	ISO 4649	55	45	50	40
Hysteresis 10% deformation	%	INTERNAL	13,5	12,5	11,0	16,0
Minimum service temperature	°C	INTERNAL	-20	-50	-30	0

* Increased grip in wet conditions, increased slip resistance

TYPICAL PHYSICAL PROPERTIES	UNIT	TEST METHOD	VTER product range					
			VTER-N	VTER-V*	VTER-E	VTER-R	VTER-H	VTER-M
Hardness	Sh	DIN 53505	92A	92A	95A	95A	98A	98A
Hardness	Sh	DIN 53505	46D	46D	52D	52D	57D	57D
tan δ at 25°C	/	ISO 6721-11	0,110	0,080	0,090	0,090	0,110	0,100
Modulus 50%	MPa	DIN53504	7	6	10	10	13	13
Modulus 100%	MPa	DIN53504	9	9	13	13	16	16
Modulus 300%	MPa	DIN53504	18	17	22	22	25	25
Tensile strength	MPa	DIN53504	47	36	50	52	45	42
Elongation at break	%	DIN53504	510	520	500	500	450	480
Tear resistance, die B/a (90°, without nick)	kN/m	ISO 34-1	95	75	115	110	125	120
Tear resistance, die B/b (90°, with nick)	kN/m	ISO 34-1	90	60	110	105	115	115
Compression set at 70°C / 23h	%	ISO 815	16	12	16	16	20	18
Rebound resilience	%	ISO 4662	55	72	67	60	50	59
Abrasion resistance	mg	ISO 4649	70	65	75	75	85	80
Minimum service temperature	°C	ISO 6721-11	-37	-47	-30	-30	-37	-27
Available hardness range	Sh	DIN 53505	78A - 57D	78A - 95A	78A - 57D	78A - 57D	57D	95A - 57D

* Under final development phase.

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About Huntsman:

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