

Material Data Sheet

Material: N4180

black

cross linking: sulphur

Tested according to ASTM D2000 M 5 BG 814 A14 B14 EO14 EO34 Z1 Z2

			required	actual	
	Hardness ,	(ASTM D2240),	ShA	80 ± 5	79
	Tensile strength	(ASTM D412),	min MPa	>14	17
	Ultimate elongation,	(ASTM D412),	min %	> 125	160
A14	Heat resistance, Test method ASTM D573 (70h @ 100 C)				
	Change in hardness,	(ASTM D2240),	max points	±15	+4
	Change in tensile strength,	(ASTM D412),	max %	-20	-12
	Change in ultimate elongation,	(ASTM D412),	max %	-40	-15
B14	Compression set, Metod B ASTM D395 (22h @ 100 C; 25%),				
			max %	25	+12
EO14	Fluid resistance, Test Method ASTM D471 ASTM Oil#1, (70h @ 100 C)				
	Change in hardness,	(ASTM D2240),	max points	-5 to+15	-3
	Change in tensile strength,	(ASTM D412),	max %	-25	+5
	Change in ultimate elongation,	(ASTM D412),	max %	-45	-20
	Change in volume,	(ASTM D 471),	max %	-10 to+5	-1
EO34	Fluid resistance, Test Method ASTM D471 ASTM Oil#3, (70h @ 100 C)				
	Change in hardness,	(ASTM D2240),	max points	0 to-15	-4
	Change in tensile strength,	(ASTM D412),	max %	-45	-22
	Change in ultimate elongation,	(ASTM D412),	max %	-45	-20
	Change in volume,	(ASTM D 471),	max %	0to+35	+17
Z1	Low-temperature resistance (ISO 2921, TR 10; 50%)				
			°C		-46
Z2	Fluid resistance, Test Method ASTM D471 MOLYKOTE 55M, (70h @ 100 C)				
	Change in hardness,	(ASTM D2240),	max points	-5 to-15	-3
	Change in tensile strength,	(ASTM D412),	max %	-25	10
	Change in ultimate elongation,	(ASTM D412),	max %	-25	-12
	Change in volume,	(ASTM D 471),	max %	-1 to+5	+3

The given values are based on a limited number of tests on standard test pieces (2mm sheets) produced in the laboratory. The data from finished parts can deviate from above values depending on the manufactories process and the component geometry.

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