



Technical data sheet in accordance with ASTM

Material NBR NB902803

black

cross linking: sulfur

revision index 5	revision date 8/22/2023			pa	ge 1/3
Physical properties			nominal range	typical values	
Density ASTM D297			1.29 ±0.02	1.29	g/cm³
Hardness ASTM D2240, Shore A			90 ±5	86	Shore
Tensile strength ASTM D412			> 10	19.7	MPa
Elongation at break ASTM D412			> 100	206	%
Modulus 100 %, ASTM D412				9.9	MPa
Compression set ASTM D395, Slab B, 22 h, 100 °	°C, solid button		25	6	%
Compression set ASTM D395, Slab B, 22 h, 100 °	°C, plied sheet		25	13	%
Temperature range		-30°C to 100°C			

Declarations of conformity

This overview is purely informative and does not constitute a declaration of conformity (DoC). Please refer to the actual declaration of conformity (DoC) including the conditions and its validity period.

	Country	Part	Remark	Expires
Info ROHS and ELV			EU 2000/53 (ELV) including EU 2011/65 and EU2015/863 (ROHS III)	see DoC
PFOA / PFOS free			see certificate	see DoC

Change after aging		Typ. values		
in Air: 70h/100°C		Base value	After aging	difference
Hardness (ASTM D865, Shore A, 23 °C)	Shore	86	89	3
Tensile strength (ASTM D865, 23 °C)	MPa	19.7	17.8	-10 %
Elongation at break (ASTM D865, 23 °C)	%	206	151.6	-26 %

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Change after aging in Fuel A: 70h/23°C Base value in Fuel A: 70h/23°C Shore in Fuel B: 70h/23°C Typ. valuer in Fuel B: 70h/23°C Shore in Fuel B: 70h/23°C Shore in Fuel A: 70h	revision index 5	revision date 8/22/2023			page	2/3
in Fuel A: 70h/23°C Base value After aging difference Hardness (ASTM D471, Shore A, 23 °C) Shore 86 86 0 Tensile strength (ASTM D471) MPa 19.7 17.6 -11 % Elongation at break (ASTM D471) % 20 18.9 -8 % volume change (ASTM D471) % 20 11.1 -11.1 Change after aging in Fuel B: 70h/23°C Shore 86 68 -18 Hardness (ASTM D471, Shore A, 23 °C) Shore 86 68 -8 -18 Hardness (ASTM D471) MPa 19.7 14.4 -2.7 % -2.7 % -15 %	Change after aging				Typ. values	
Tensile strength (ASTM D471)				Base value	After aging	difference
Elongation at brak (ASTM D471)	•	C)				_
Volume change (ASTM D471) % Typ. valuer Change after aging in Fuel B: 70h/23°C Base value after aging planted by the problem of the proble	<u> </u>				_	
Change after aging in Fuel B: 70h/23°C Base value after problemance of the problemance				206		-8 %
In Fuel B: 70h/23°C Base value After aging difference Hardness (ASTM D471, Shore A, 23 °C) Shore 86 68 -18 Tensile strength (ASTM D471) MPa 19.7 14.4 -27 % Elongation at break (ASTM D471) % 206 175.7 -15 % volume change (ASTM D471) % 206 175.7 -15 % Change after aging in IRM 901: 70h/100°C Base value After aging difference Hardness (ASTM D471, Shore A) Shore 86 88 2 Tensile strength (ASTM D471) MPa 19.7 18.2 -8 % Elongation at break (ASTM D471) % 206 183.7 -11 % volume change (ASTM D471) % 206 183.7 -11 % Volume change (ASTM D471) % 206 183.7 -11 % Change after aging in IRM 903: 70h/100°C Shore 86 80 -6 Hardness (ASTM D471, Shore A, 23 °C) Shore 86 80 -6 Tensile strength (ASTM D471)	volume change (ASTM D471)		%		1.1	
In Fuel B: 70h/23°C Base value After aging difference Hardness (ASTM D471, Shore A, 23 °C) Shore 86 68 -18 Tensile strength (ASTM D471) MPa 19.7 14.4 -27 % Elongation at break (ASTM D471) % 206 175.7 -15 % volume change (ASTM D471) % 206 175.7 -15 % Change after aging in IRM 901: 70h/100°C Base value After aging difference Hardness (ASTM D471, Shore A) Shore 86 88 2 Tensile strength (ASTM D471) MPa 19.7 18.2 -8 % Elongation at break (ASTM D471) % 206 183.7 -11 % volume change (ASTM D471) % 206 183.7 -11 % Change after aging in IRM 903: 70h/100°C Base value After agin difference Hardness (ASTM D471, Shore A, 23 °C) Shore 86 80 -6 Tensile strength (ASTM D471) % 206 191.3 -7 % Volume change (ASTM D471)	Change after aging				Typ. values	
Tensile strength (ASTM D471) MPa 19.7 14.4 -27 % Elongation at break (ASTM D471) % 206 175.7 -15 % volume change (ASTM D471) % 206 175.7 -15 % Change after aging in IRM 901: 70h/100°C Typ. value After aging difference Base value After aging difference difference Hardness (ASTM D471, Shore A) Shore 86 88 2 Tensile strength (ASTM D471) MPa 19.7 18.2 -8 % Elongation at break (ASTM D471) % 206 183.7 -11 % volume change (ASTM D471) % 206 183.7 -11 % volume change (ASTM D471) % 206 183.7 -11 % Hardness (ASTM D471, Shore A, 23 °C) Shore 86 80 -6 Tensile strength (ASTM D471) MPa 19.7 19.3 -2 % Elongation at break (ASTM D471) % 206 191.3 -7 % volume change (ASTM D471) % 206 191.3 -7 %				Base value	After aging	difference
Elongation at break (ASTM D471) % 206 175.7	Hardness (ASTM D471, Shore A, 23 °	C)	Shore	86	68	-18
Change after aging in IRM 901: 70h/100°C Typ. values Hardness (ASTM D471, Shore A) Shore 88 se value After aging difference Fensile strength (ASTM D471) MPa 19.7 18.2 -8 % Elongation at break (ASTM D471) % 206 183.7 -11 % volume change (ASTM D471) % 206 183.7 -11 % volume change (ASTM D471) % 206 183.7 -11 % Change after aging in IRM 903: 70h/100°C Base value After aging difference Hardness (ASTM D471, Shore A, 23 °C) Shore 86 80 -6 Tensile strength (ASTM D471) MPa 19.7 19.3 -2 % Elongation at break (ASTM D471) % 206 191.3 -7 % volume change (ASTM D471) % 206 191.3 -7 % volume change (ASTM D471) % 206 191.3 -7 % volume change (ASTM D471) % 8 8 -2 Change after aging in Water: 70h/100°C Bas	Tensile strength (ASTM D471)		MPa	19.7	14.4	-27 %
Change after aging in IRM 901: 70h/100°C Typ. value base v	Elongation at break (ASTM D471)		%	206	175.7	-15 %
In IRM 901: 70h/100°C Base value After aging difference Hardness (ASTM D471, Shore A) Shore 86 88 2 Tensile strength (ASTM D471) MPa 19.7 18.2 -8 % Elongation at break (ASTM D471) % 206 183.7 -11 % volume change (ASTM D471) % 206 183.7 -11 % Change after aging in IRM 903: 70h/100°C Base value After aging difference Hardness (ASTM D471, Shore A, 23 °C) Shore 86 80 -6 Tensile strength (ASTM D471) MPa 19.7 19.3 -2 % Elongation at break (ASTM D471) % 206 191.3 -7 % volume change (ASTM D471) % 206 191.3 -7 % volume change (ASTM D471) % 206 191.3 -7 % Change after aging in Water: 70h/100°C Base value After aging difference After aging difference Hardness (ASTM D2240, Shore A, 23 °C) Shore 86 84 -2	volume change (ASTM D471)		%		26	
Hardness (ASTM D471, Shore A) Tensile strength (ASTM D471) Blongation at break (ASTM D471) Volume change (ASTM D471) Change after aging in IRM 903: 70h/100°C Hardness (ASTM D471) MPa 19.7 18.2 -8 % 206 183.7 -11 % 307 -2.4 Change after aging in IRM 903: 70h/100°C Base value After aging Typ. values Base value After aging After aging IRM Pa 19.7 19.3 -2 % Base value After aging IRM Pa 19.7 19.3 -2 % 19.7 × volume change (ASTM D471) MPa 19.7 19.3 -7 % 19.8 × volume change (ASTM D471) MPa 19.8 × Volume change (ASTM D471) MPa 19.9 × Volume change (ASTM	Change after aging				Typ. values	
Tensile strength (ASTM D471) MPa 19.7 18.2 -8 % Elongation at break (ASTM D471) % 206 183.7 -11 % volume change (ASTM D471) % 206 183.7 -11 % Change after aging in IRM 903: 70h/100°C Typ. values Hardness (ASTM D471, Shore A, 23 °C) Shore 86 80 -6 Tensile strength (ASTM D471) MPa 19.7 19.3 -2 % Elongation at break (ASTM D471) % 206 191.3 -7 % volume change (ASTM D471) % 206 191.3 -7 % Volume change (ASTM D471) % 8.4 -8 Change after aging in Water: 70h/100°C Shore 86 84 -2	in IRM 901: 70h/100°C			Base value	After aging	difference
Elongation at break (ASTM D471)	Hardness (ASTM D471, Shore A)		Shore	86	88	2
volume change (ASTM D471) % -2.4 Change after aging in IRM 903: 70h/100°C Typ. values Hardness (ASTM D471, Shore A, 23 °C) Shore 86 80 -6 Tensile strength (ASTM D471) MPa 19.7 19.3 -2 % Elongation at break (ASTM D471) % 206 191.3 -7 % volume change (ASTM D471) % 8.4 -7 % Change after aging in Water: 70h/100°C Base value After aging difference Hardness (ASTM D2240, Shore A, 23 °C) Shore 86 84 -2	g \ ,				-	
Change after aging in IRM 903: 70h/100°C Typ. value after aging base value in IRM 903: 70h/100°C Typ. value after aging base value after aging after aging aging base value after aging and water: 70h/100°C Shore after aging after aging aging aging after aging aging after aging aging after aging aging after aging ag	,			206		-11 %
In IRM 903: 70h/100°C Base value After aging difference Hardness (ASTM D471, Shore A, 23 °C) Shore 86 80 -6 Tensile strength (ASTM D471) MPa 19.7 19.3 -2 % Elongation at break (ASTM D471) % 206 191.3 -7 % volume change (ASTM D471) % 8.4 8.4 Change after aging in Water: 70h/100°C Base value After aging difference Hardness (ASTM D2240, Shore A, 23 °C) Shore 86 84 -2	volume change (ASTM D471)		%		-2.4	
Hardness (ASTM D471, Shore A, 23 °C) Tensile strength (ASTM D471) Elongation at break (ASTM D471) Volume change (ASTM D471) Change after aging in Water: 70h/100°C Shore	Change after aging				Typ. values	
Tensile strength (ASTM D471) MPa 19.7 19.3 -2 % Elongation at break (ASTM D471) % 206 191.3 -7 % volume change (ASTM D471) % 8.4 Typ. values Change after aging in Water: 70h/100°C Base value After aging difference Hardness (ASTM D2240, Shore A, 23 °C) Shore 86 84 -2	in IRM 903: 70h/100°C			Base value	After aging	difference
Elongation at break (ASTM D471) % 206 191.3 -7 % volume change (ASTM D471) % 8.4 Typ. values Change after aging in Water: 70h/100°C Base value After aging difference Hardness (ASTM D2240, Shore A, 23 °C) Shore 86 84 -2	Hardness (ASTM D471, Shore A, 23 °	C)	Shore	86	80	-6
volume change (ASTM D471) % 8.4 Change after aging in Water: 70h/100°C Typ. values Hardness (ASTM D2240, Shore A, 23 °C) Shore 86 84 -2	Tensile strength (ASTM D471)		MPa	19.7	19.3	-2 %
Change after aging in Water: 70h/100°C Base value After aging difference Hardness (ASTM D2240, Shore A, 23 °C) Shore 86 88 -2	Elongation at break (ASTM D471)		%	206	191.3	-7 %
in Water: 70h/100°C Hardness (ASTM D2240, Shore A, 23 °C) Shore 86 84 -2	volume change (ASTM D471)		%		8.4	
Hardness (ASTM D2240, Shore A, 23 °C) Shore 86 84 -2	Change after aging				••	
	in Water: 70h/100°C			Base value	After aging	difference
volume change (ASTM D471) % 6.4	Hardness (ASTM D2240, Shore A, 23	°C)	Shore	86	84	-2
	volume change (ASTM D471)		%		6.4	

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No ASTM D2000 properties available

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

The data represents our present empirical values. It is incumbent on the person placing the order to examine whether it is suitable for its intended purpose, before using the product. All questions regarding the guarantee of this product are in line with our terms and conditions, inasmuch as statutory provisons do not plan for something else.

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