

Technical data sheet in accordance with ASTM

Material

NBR NB701807

black

cross linking: sulfur

revision index	revision date	page	1 / 3
2	7/4/2019		

Physical properties	nominal range	typical values	
Density ASTM D1817	1.17 ±0.02	1.17	g/cm ³
Hardness ASTM D2240, Shore A	70 ±5	70	Shore
Tensile strength ASTM D412	---	20	MPa
Elongation at Break ASTM D412	---	354	%
Modulus 100 %, ASTM D 412	---	499	Psi
Low temperature test ASTM D1329, TR10	---	-23	°C
Compression set ASTM D395, B, 22 h, 100 °C	---	10	%
Temperature range	-30°C to 100°C		

Declarations of conformity

	Country	Part	Remark	Expires	unlimited
BPA/Phthalate free			BPA/Phthalate free		<input checked="" type="checkbox"/>
RoHS conform			including EU 2011/65 and EU2015/863 (ROHS III)		<input checked="" type="checkbox"/>

Change after aging in Air: 70h/100°C

		Typ. values		
		Base value	After aging	difference
Hardness (ASTM D2240, Shore A)	Shore	70	74	4
Tensile strength (ASTM D412)	MPa	20	17.6	-12 %
Elongation at Break (ASTM D412)	%	354	262	-26 %
weight change	%		-0.6	

Freudenberg

Freudenberg Industrial Services GmbH
 Global Material Technology
 Nadja Güldner
 Telefon: +49 40 66989 279
 Fax: +49 40 66989 9279
 Email: nadja.gueldner@fst.com

Technical data sheet in accordance with ASTM

Material

NBR NB701807

black

cross linking: sulfur

revision index

2

revision date

7/4/2019

page 2 / 3

Change after aging in Fuel A: 70h/23°C

Hardness (ASTM D2240, Shore A)
Tensile strength (ASTM D412)
Elongation at Break (ASTM D412)
volume change (ASTM D471)

Shore
MPa
%
%

Typ. values			
Base value	After aging	difference	
70	69	-1	
20	17.6	-12 %	
354	3	-99 %	
	1.2		

Change after aging in Fuel B: 70h/23°C

Hardness (ASTM D2240, Shore A)
Tensile strength (ASTM D412)
Elongation at Break (ASTM D412)
volume change (ASTM D471)

Shore
MPa
%
%

Typ. values			
Base value	After aging	difference	
70	53	-17	
20	8.8	-56 %	
354	194	-45 %	
	36.9		

Change after aging in IRM 901: 70h/100°C

Hardness (ASTM D2240, Shore A)
Tensile strength (ASTM D412)
Elongation at Break (ASTM D412)
volume change (ASTM D471)

Shore
MPa
%
%

Typ. values			
Base value	After aging	difference	
70	70	0	
20	19.8	-1 %	
354	329	-7 %	
	0.2		

Change after aging in IRM 903: 70h/100°C

Hardness (ASTM D2240, Shore A)
Tensile strength (ASTM D412)
Elongation at Break (ASTM D412)
volume change (ASTM D471)

Shore
MPa
%
%

Typ. values			
Base value	After aging	difference	
70	61	-9	
20	18	-10 %	
354	304	-14 %	
	12.2		

Change after aging in Water: 70h/100°C

Hardness (ASTM D2240, Shore A)
Tensile strength (ASTM D412)
Elongation at Break (ASTM D412)
volume change (ASTM D471)

Shore
MPa
%
%

Typ. values			
Base value	After aging	difference	
70	65	-5	
20	19	-5 %	
354	297	-16 %	
	6.4		

Freudenberg

Freudenberg Industrial Services GmbH
Global Material Technology
Nadja Güldner
Telefon: +49 40 66989 279
Fax: +49 40 66989 9279
Email: nadja.gueldner@fst.com

Technical data sheet in accordance with ASTM

Material

NBR NB701807

black

cross linking: sulfur

revision index

2

revision date

7/4/2019

page

3 / 3

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 manufacturing 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 provisions do not plan for something else.

Freudenberg

Freudenberg Industrial Services GmbH

Global Material Technology

Nadja Güldner

Telefon: +49 40 66989 279

Fax: +49 40 66989 9279

Email: nadja.gueldner@fst.com