

Technical data sheet in accordance with ASTM

Material

NBR NB603412

black

cross linking: sulfur

revision index	revision date	page	1 / 3
2	12/10/2018		

Physical properties	nominal range	typical values	
Density ASTM D1817	1.24 ±0.02	1.24	g/cm ³
Hardness ASTM D2240, Shore A	60 ±5	62	Shore
Tensile strength ASTM D412, C	---	13.5	MPa
Elongation at Break ASTM D412, C	---	449	%
Tear strength ASTM D624, C	---	48	KN/m
Ozone Resistance ASTM D1171, 40 °C, 72 h, 50 pphm, 20% (no crack)	---	0	Rating
Low temperature test ASTM D1329, TR10	---	-36	°C
Compression set ASTM D395, B, 22 h, 100 °C, 25 %	---	7	%
Temperature range	-40°C to 100°C		

Declarations of conformity

	Country	Part	Remark	Expires	unlimited
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	62	70	8
Tensile strength (ASTM D412)	MPa	13.5	14.6	8 %
Elongation at Break (ASTM D412)	%	449	345	-23 %
volume change (ASTM D471)	%		-6	

Freudenberg

Freudenberg Industrial Services GmbH
 Global Material Technology
 Nadja Güldner
 Telefon: +49 6201 80 2182
 Fax: -
 Email: nadja.gueldner@fst.com

Technical data sheet in accordance with ASTM

Material

NBR NB603412

black

cross linking: sulfur

revision index

2

revision date

12/10/2018

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)

	Base value	After aging	difference
Shore	62	62	0
MPa	13.5	13	-4 %
%	449	422	-6 %
%		-1	

Typ. values

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)

	Base value	After aging	difference
Shore	62	53	-9
MPa	13.5	7.5	-44 %
%	449	260	-42 %
%		17	

Typ. values

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)

	Base value	After aging	difference
Shore	62	66	4
MPa	13.5	15.3	13 %
%	449	354	-21 %
%		-9	

Typ. values

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)

	Base value	After aging	difference
Shore	62	62	0
MPa	13.5	13.8	2 %
%	449	368	-18 %
%		1	

Typ. values

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)

	Base value	After aging	difference
Shore	62	60	-2
MPa	13.5	12.3	-9 %
%	449	354	-21 %
%		3	

Typ. values

Freudenberg

Freudenberg Industrial Services GmbH
Global Material Technology
Nadja Güldner
Telefon: +49 6201 80 2182
Fax: -
Email: nadja.gueldner@fst.com

Technical data sheet in accordance with ASTM

Material

NBR NB603412

black

cross linking: sulfur

revision index

2

revision date

12/10/2018

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 6201 80 2182

Fax: -

Email: nadja.gueldner@fst.com