

Technical data sheet in accordance with ASTM

# Material

## NBR NB903411

black

cross linking: sulfur

**revision index**

1

**revision date**

8/13/2018

**page**

1 / 3

### Physical properties

	nominal range	typical values	
<b>Density</b> ASTM D1817	1.32 ±0.02	1.32	g/cm <sup>3</sup>
<b>Hardness</b> ASTM D2240, Shore A	90 ±5	88	Shore
<b>Tensile strength</b> ASTM D412	---	17.6	MPa
<b>Elongation at Break</b> ASTM D412	---	139	%
<b>Tear strength</b> ASTM D624, C	---	48	KN/m
<b>Compression set</b> ASTM D395, B, 22 h, 100 °C, 25 %	---	6	%
<b>Temperature range</b>	-35°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
RoHS conform			including EU 2011/65 and EU2015/863 (ROHS III)	see DoC

### Change after aging in Air: 70h/100°C

		Typ. values		
		Base value	After aging	difference
Hardness (ASTM D2240, Shore A)	Shore	88	91	3
Tensile strength (ASTM D412)	MPa	16.6	15.9	-4 %
Elongation at Break (ASTM D412)	%	119	101.1	-15 %

### Freudenberg

Freudenberg Industrial Services GmbH  
 Global Material Technology  
 Nadja Güldner  
 Telefon: -  
 Fax: -  
 Email: FIS.Compound.CRC@fst.com

Technical data sheet in accordance with ASTM

# Material

## NBR NB903411

black

cross linking: sulfur

**revision index**

1

**revision date**

8/13/2018

**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)

Shore  
MPa  
%  
%

Typ. values			
Base value	After aging	difference	
88	88	0	
16.6	14.3	-14 %	
119	113	-5 %	
	0		

### 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	
88	79	-9	
16.6	12.4	-25 %	
119	94	-21 %	
	12		

### 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	
88	93	5	
16.6	15.4	-7 %	
119	96.4	-19 %	
	-5		

### 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	
88	86	-2	
16.6	16.4	-1 %	
119	104.7	-12 %	
	5		

## Freudenberg

Freudenberg Industrial Services GmbH  
Global Material Technology  
Nadja Güldner  
Telefon: -  
Fax: -  
Email: FIS.Compound.CRC@fst.com

Technical data sheet in accordance with ASTM

## **Material**

### **NBR NB903411**

black

cross linking: sulfur

**revision index**

1

**revision date**

8/13/2018

**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: -  
Fax: -  
Email: FIS.Compound.CRC@fst.com