

Technical data sheet in accordance with ASTM

Material

NBR NB702822

black

cross linking: sulfur

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Physical properties

Density

ASTM D 1817, 23 °C

1.23 ±0.02

typical values

1.23

 g/cm³
Hardness

ASTM D 2240, Shore A, 23 °C

70 ±5

70

Shore

Tensile strength

ASTM D 412, 23 °C

16.3

MPa

Elongation at Break

ASTM D 412, 23 °C

355

%

Compression set

ASTM D 395, B, 22 h, 100 °C, 25 %

8

%

Compression set

ASTM D 395, B, 70 h, 100 °C, 25 %

12

%

Compression set

ASTM D 395, B, 168 h, 100 °C, 25 %

17

%

Compression set

DIN ISO 815, 72 h, -20 °C, 25 %

36

%

Low temperature test

ASTM D 1329, TR10

-30

°C

Temperature range

-30°C to 100°C

Declarations of conformity

	Country	Part	Remark	Expires	unlimited
ADI Free					☒
DVGW Baumusterprüfzertifikat Gas DIN EN 549 H3 B1	D	not defined	DIN EN 549 H3 B1	06 / 2022	☐
DVGW Baumusterprüfzertifikat Gas DIN EN 549 H3 B1	D	not defined	english	06 / 2022	☐
RoHS			Restricted substances in electrical and electronic equipment		☒

Freudenberg

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Change after aging in Air: 70h/100°C

Hardness (ASTM D2240, Shore A, 23 °C)

Tensile strength (ASTM D412)

Elongation at Break (ASTM D412)

Shore

MPa

%

Typ. values			
Base value	After aging	difference	
70	74	4	
16.3	16.5	1 %	
355	318.8	-10 %	

Change after aging in Air: 168h/100°C

Hardness (ASTM D2240, Shore A, 23 °C)

Tensile strength (ASTM D412)

Elongation at Break (ASTM D412)

Shore

MPa

%

Typ. values			
Base value	After aging	difference	
70	76	6	
16.3	16.5	1 %	
355	297.5	-16 %	

Change after aging in Air: 504h/100°C

Hardness (ASTM D2240, Shore A, 23 °C)

Tensile strength (ASTM D412)

Elongation at Break (ASTM D412)

Shore

MPa

%

Typ. values			
Base value	After aging	difference	
70	81	11	
16.3	16.7	2 %	
355	241.8	-32 %	

Change after aging in Air: 24h/120°C

Hardness (ASTM D2240, Shore A, 23 °C)

Tensile strength (ASTM D412)

Elongation at Break (ASTM D412)

Shore

MPa

%

Typ. values			
Base value	After aging	difference	
70	75	5	
16.3	16.8	3 %	
355	312	-12 %	

Change after aging in Air: 70h/120°C

Hardness (ASTM D2240, Shore A, 23 °C)

Tensile strength (ASTM D412)

Elongation at Break (ASTM D412)

Shore

MPa

%

Typ. values			
Base value	After aging	difference	
70	78	8	
16.3	16.6	2 %	
355	264.1	-26 %	

Change after aging in Air: 70h/125°C

Hardness (ASTM D2240, Shore A, 23 °C)

Tensile strength (ASTM D412)

Elongation at Break (ASTM D412)

Shore

MPa

%

Typ. values			
Base value	After aging	difference	
70	81	11	
16.3	16.8	3 %	
355	254.9	-28 %	

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Change after aging in ASTM-Oil No. 1: 70h/100°C

 Hardness (ASTM D2240, Shore A, 23 °C)
 Tensile strength (ASTM D412)
 Elongation at Break (ASTM D412)
 volume change (ASTM D471)

 Shore
 MPa
 %
 %

Typ. values			
Base value	After aging	difference	
70	78	8	
16.3	16.6	2 %	
355	295	-17 %	
	-9.1		

Change after aging in ASTM-Oil No. 1: 168h/100°C

 Hardness (ASTM D2240, Shore A, 23 °C)
 Tensile strength (ASTM D412)
 Elongation at Break (ASTM D412)
 volume change (ASTM D471)

 Shore
 MPa
 %
 %

Typ. values			
Base value	After aging	difference	
70	78	8	
16.3	17.2	6 %	
355	285	-20 %	
	-8.6		

Change after aging in ASTM-Oil No. 1: 70h/125°C

 Hardness (ASTM D2240, Shore A, 23 °C)
 Tensile strength (ASTM D412)
 Elongation at Break (ASTM D412)
 volume change (ASTM D471)

 Shore
 MPa
 %
 %

Typ. values			
Base value	After aging	difference	
70	79	9	
16.3	17.2	6 %	
355	289	-19 %	
	-8.2		

Change after aging in ASTM-Oil No. 1: 70h/150°C

 Hardness (ASTM D2240, Shore A, 23 °C)
 Tensile strength (ASTM D412)
 Elongation at Break (ASTM D412)
 volume change (ASTM D471)

 Shore
 MPa
 %
 %

Typ. values			
Base value	After aging	difference	
70	78	8	
16.3	16.3	0 %	
355	265	-25 %	
	-7.9		

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

 Hardness (ASTM D2240, Shore A, 23 °C)
 Tensile strength (ASTM D412)
 Elongation at Break (ASTM D412)
 volume change (ASTM D471)

 Shore
 MPa
 %
 %

Typ. values			
Base value	After aging	difference	
70	67	-3	
16.3	14.3	-12 %	
355	255	-28 %	
	4.5		

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Change after aging in IRM 903: 168h/100°C

Hardness (ASTM D2240, Shore A, 23 °C)
 Tensile strength (ASTM D412)
 Elongation at Break (ASTM D412)
 volume change (ASTM D471)

Shore
 MPa
 %
 %

Typ. values			
Base value	After aging	difference	
70	67	-3	
16.3	14.4	-12 %	
355	240	-32 %	
	12.7		

Change after aging in IRM 903: 70h/125°C

Hardness (ASTM D2240, Shore A, 23 °C)
 Tensile strength (ASTM D412)
 Elongation at Break (ASTM D412)
 volume change (ASTM D471)

Shore
 MPa
 %
 %

Typ. values			
Base value	After aging	difference	
70	67	-3	
16.3	13.7	-16 %	
355	236	-34 %	
	13.6		

Change after aging in IRM 903: 70h/150°C

Hardness (ASTM D2240, Shore A, 23 °C)
 Tensile strength (ASTM D412)
 Elongation at Break (ASTM D412)
 volume change (ASTM D471)

Shore
 MPa
 %
 %

Typ. values			
Base value	After aging	difference	
70	62	-8	
16.3	13.4	-18 %	
355	241	-32 %	
	12.9		

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

Hardness (ASTM D2240, Shore A, 23 °C)
 volume change (ASTM D471)

Shore
 %

Typ. values			
Base value	After aging	difference	
70	66	-4	
	6		

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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 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.

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