DICHTOMATIK

FREUDENBERG
SEALING TECHNOLOGIES

Material
80 NBR N801B

Version	Released on
01	24.09.2021

General Data

Colour:	Black
Type of cross-linking:	Sulfur

Physical Properties	**Nominal Range**	**Typical Value**	
Density ASTM D297		1.26	g/cm³
Hardness ASTM D 2240, Shore A	80 ±5	80	Shore
Tensile strength ASTM D 412	>14	18	MPa
Elongation at break ASTM D 412	>125	235	%
Compression set ASTM D 395, B, 22 h, 100 °C, max.		7.3	%

This data sheet supersedes all previous versions. The content is subject to change without prior notice. The given values are based on a limited number of tests on standard test pieces (2mm sheets) produced in the laboratory. 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.

Print date: 23.06.2026

Freudenberg Industrial Services GmbH
Global Material Technology
Email: FIS.Compound.CRC@fst.com

Material
80 NBR N801B

Version	Released on
01	24.09.2021

Tested after ASTM D 2000: M 6 BG 8 14 A14 B14 EA14 EF11 EF21 EO14 EO34 Z1 Z2 Z3 Z4 Z5

ASTM Property		Nominal Range	Typical Value
Tensile strength	MPa	min. 14	18
Hardness	Shore	80 ±5	80
Elongation at break	%	min. 125	235
A14 Air 70.00h/100.00°C			
Elongation at break	%	-40	-6
Hardness	Shore	±15	2
Tensile strength	MPa	-20	5
B14 22.00h/100.00°C			
Compression set	%	25	7.3
EA14 Distilled Water 70.00h/100.00°C			
Volume change	%		3.7
Hardness	Shore		-2
EF11 Fuel A 70.00h/23.00°C			
Hardness	Shore		-5
Volume change	%		4.5
Elongation at break	%		-5
Tensile strength	MPa		-13
EF21 Fuel B 70.00h/23.00°C			
Tensile strength	MPa		-27
Volume change	%		34.8
Hardness	Shore		-19
Elongation at break	%		-27
EO14 IRM 901 70.00h/100.00°C			
Hardness	Shore	-5 to 15	3

Freudenberg Industrial Services GmbH
Global Material Technology
Email: FIS.Compound.CRC@fst.com

Tensile strength	MPa	-25	7
Volume change	%	-10 to 5	-2.9
Elongation at break	%	-45	-5

EO34 IRM 903 70.00h/100.00°C

Hardness	Shore	0 to -20	-10
Volume change	%	0 to 35	14.2
Elongation at break	%	-45	-6
Tensile strength	MPa	-45	2

F17 3.00min/-40.00°C

Low temperature resistance	°C	pass	pass

Z1

Modulus	MPa		8.05
Tear Resistance	MPa		48

Z1 ASTM D412, 100 %

Modulus	MPa		8.05
Tear Resistance	MPa		48

Z2 ASTM D412, 200 %

Modulus	MPa		15.98

Z3 ASTM D792,

Specific gravity	g/cc		1.265

Z4

Volume change	%		4.5
Elongation at break	%		-5
Tensile strength	MPa		-13
Hardness	Shore		-5

Z5

Hardness	Shore		-19
Volume change	%		34.8
Tensile strength	MPa		-27
Elongation at break	%		-27

This data sheet supersedes all previous versions. The content is subject to change without prior notice. The given values are based on a limited number of tests on standard test pieces (2mm sheets) produced in the laboratory. The data from finished parts can deviate from

Freudenberg Industrial Services GmbH
Global Material Technology
Email: FIS.Compound.CRC@fst.com

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.

Print date: 23.06.2026

Freudenberg Industrial Services GmbH
Global Material Technology
Email: FIS.Compound.CRC@fst.com

End of Document

Freudenberg Industrial Services GmbH
Global Material Technology
Email: FIS.Compound.CRC@fst.com