Material
90 NBR 109

Version	Released on
05	01.09.2016

General Data

Colour: Black

Physical Properties	**Nominal Range**	**Typical Value**	
Density DIN EN ISO 1183-1	1.33 ±0.02	1.33	g/cm³
Hardness DIN ISO 7619-1	90 ±5	90	Shore
Rebound resilience DIN 53512			%
Modulus 100 %, DIN 53504, S2	8	11.5	MPa
Tensile strength DIN 53504, S2	10	12.6	MPa
Elongation at break DIN 53504, S2	110	155	%
Compression set DIN ISO 815, 22 h, 100 °C		25	%
Glass transition temperature ISO 11357-2, DSC		-26	°C

Temperature Range

static: -25 to 100 °C

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.

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Tested after ASTM D 2000: M 7 BG 9 10 A14 B14 EA14 EF11 EF21 EO14 EO34

ASTM Property		Nominal Range	Typical Value
Hardness	Shore	90 ±5	93
Tensile strength	MPa	min. 10	14.5
Elongation at break	%	min. 100	145
A14 Air 70.00h/100.00°C			
Elongation at break	%		-14
Tensile strength	MPa		7
Hardness	Shore		2
B14 22.00h/100.00°C			
Compression set	%	25	21
EA14 Distilled Water 70.00h/100.00°C			
Hardness	Shore	±10	-4
Volume change	%	±15	6
EF11 Fuel A 70.00h/23.00°C			
Hardness	Shore	±10	-2
Volume change	%	-5 to 10	1.7
Tensile strength	MPa	-25	-15
Elongation at break	%	-25	-11
EF21 Fuel B 70.00h/23.00°C			
Hardness	Shore	0 to -30	-14
Volume change	%	0 to 40	23
Tensile strength	MPa	-60	-45
Elongation at break	%	-60	-37
EO14 IRM 901 70.00h/100.00°C			

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Tensile strength	MPa	-25	-15
Hardness	Shore	±5	5
Volume change	%	-10 to 5	-6
Elongation at break	%	-45	-25

EO34 IRM 903 70.00h/100.00°C

Hardness	Shore	-10 to 5	-8
Elongation at break	%	-45	-28
Tensile strength	MPa	-45	-15
Volume change	%	0 to 25	11

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Regulatory Material Information for 90 NBR 109

This overview reflects the current available conformity documents for this specific material only, applicable at the date of issue identified below, to the best of our knowledge. It is for information purposes only and does not replace the Declarations of Conformity (DoC) or other article or product-based assessments. The DoC are available upon request under the conditions, limitations, and validity periods specified therein.

Overview Material related documents:	**Release Date**	**Expiration Date**
ROHS and ELV	28.11.2019	31.12.2029

Issue Date: 23.06.2026
It is valid until the mentioned expiry dates or other legal changes become effective.

Disclaimer:

This declaration supersedes all previous versions. The content is subject to change without prior notice.

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The user bears any product safety and product liability risk including risks of end users or consumers such as risk or danger for life, body or health including compliance with statutory or other regulatory or administrative requirements or technical norms relevant for the components or end products including e.g. declarations of conformity, certificates, approvals or third-party verifications, requirements regarding CE marking, market or product safety requirements or other regulatory requirements.

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