

MATERIAL DATA SHEET

NBR

GENERAL INFORMATION

NBR is an acrylonitrile-butadiene rubber commonly known as Nitrile or BUNA. It has good mechanical properties and chemical resistance to mineral oils and greases, HFA, HFB and HFC fire retardant pressure fluids. NBR is one of the most used elastomers in the sealing industry.

MECHANICAL | ELECTRICAL | THERMAL PROPERTIES

Colour:			black
Hardness at 20°:	DIN 53505	Shore A	85 +/-2
Density:	DIN ISO 1183-1	g/cm ³	1.32
100% Modulus:	DIN 53504	N/mm ²	> 10
300% Modulus:	DIN 53504	N/mm ²	
Tensile strength:	DIN 53504	N/mm ²	> 16
Elongation at break:	DIN 53504	%	> 200
Rebound resilience:	DIN 53512	%	> 25
Tear strength:	DIN ISO 34-1	N/mm ²	> 6
Abrasion:	DIN 53516	mm ³	< 90
Compression set:*	DIN ISO 815-1	%	< 10
Compression set:**	DIN ISO 815-1	%	< 10
Compression set:***	DIN ISO 815-1	%	< 15
Min. service temperature:		°C	- 30
Max. service temperature (short term):		°C	+ 100 (+120)

* Compression set @ 23°C, 72 hours, 10% deflexion

** Compression set @ 70°C, 24 hours, 20% deflexion

*** Compression set @ 100°C, 24 hours, 20% deflexion

REMARK

All test methods and values mentioned above are corresponding to ASTM | DIN | ISO standards and have been tested on standardized plates in the laboratory. All tests are made under laboratory conditions.