



Rhondama Material Data Sheets for Manufactured Parts

NBR Standard

NBR is a black Nitrile Butadiene Rubber, commonly referred to as NBR, Nitrile or Buna. Good physical properties and chemical resistance to the most common hydraulic fluids makes NBR an excellent sealing material. NBR materials are one of the most commonly used elastomers in sealing applications.

Resistant against

Water up to 70°C, HFA Fluids, HFB Fluids, Mineral Oils, Vegetable Oils, Fuels and Air Up to 100°C

Applicable for

Rod and Piston Seals, Wipers, O-Rings, Rotary Seals, Flange Seals, Gaskets.

Mechanical, Physical & Thermal Properties

properties	Condition	Standard	Unit	Value	Unit	value
hardness	23°C	ISO 868	shore A	85 ± 5	shore A	85 ± 5
modulus 100%	23°C	DIN 53 504	MPa	≥ 11	psi	≥ 1595
tensile strength	23°C	DIN 53 504	MPa	≥ 17	psi	≥ 2465
elongation at break	23°C	DIN 53 504	%	≥ 150	%	≥ 150
tear strength	23°C	DIN ISO 34-1	kN/m	≥ 18	lbf/inch	≥ 102
spec. gravity	23°C	ISO 1183	kg/m ³	1320	g/cm ³	1,32
rebound elasticity	23°C	DIN 53 512	%	20	%	20
abrasion	23°C	DIN 53 516	mm ³	130	mm ³	100
compression set	*	ISO 815	%	≤ 5	%	≤ 5
compression set	**	ISO 815	%	≤ 6	%	≤ 6
compression set	***	ISO 815	%		%	
minimum service temp			°C	-30	°F	-22
maximum service temp			°C	110	°F	230
temp. max water/steam			°C		°F	
temp. max hot air			°C		°F	

* 24h 70°C 25% def. ** 24h 100°C 25% def. *** 24h 150°C 25% def.

