

NBR Nitrile butadiene rubber
Mechanical, Physical and Thermal Properties

Properties	Condition	Standard	Unit	black	Unit	black
Colour				black		black
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	1280	g/cm ³	1,28
Rebound Elasticity	23°C	DIN 53 512	%	20	%	20
Abrasion	23°C	DIN 53 516	mm ³	100	mm ³	100
Compression Set	*	ISO 815	%	≤5	%	≤5
Compression Set	**	ISO 815	%	≤6	%	≤6
Compression Set	***	ISO 815	%		%	
Minimum Service Temperature			°C	-30	°F	-22
Maximum Service Temperature			°C	110	°F	230
Temp. max water/stream			°C		°F	
Temp. max hot air			°C		°F	

* 24h 70°C 25% def.

** 24h 100°C 25% def.

*** 24h 150°C 25% def.

Chemical Properties

copolymer, based on butadiene and acrylonitrile

Resistant to: oil, petrol and crude oil

Not resistant to: conc. acids, conc. lyes and polar solvents