

NBR 73 Nitrile butadiene rubber
 Mechanical, Physical and Thermal Properties

properties	condition	standard	unit		unit	
colour				black		black
hardness	23°C	ISO 868	Shore A	75 ± 5	Shore A	75 ± 5
modulus 100%	23°C	DIN 53 504	MPa	≥ 7	psi	≥ 1015
tensile strength	23°C	DIN 53 504	MPa	≥ 16	psi	≥ 2320
elongation at break	23°C	DIN 53 504	%	≥ 225	%	≥ 225
tear strength	23°C	DIN ISO 34-1	kN/m	≥ 5	lbf/inch	≥ 28
spec. gravity	23°C	ISO 1183	kg/m ³	1230	g/cm ³	1,23
rebound elasticity	23°C	DIN 53 512	%	28	%	28
abrasion	23°C	DIN 53 516	mm ³		mm ³	
compression set	*	ISO 815	%	≤ 5	%	≤ 5
compression set	**	ISO 815	%	≤ 8	%	≤ 8
compression set	***	ISO 815	%		%	
minimum service temperature			°C	-30	°F	-22
maximum service temperature			°C	90	°F	194
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.

Chemical Properties

NBR 73 has a service temperature range from -30°C to 90°C. It hardens at higher temperatures. It is resistant to low polar and non-polar media like vegetable and animal fats and in particular, mineral oils (lubricating oils, hydraulic oils, fuels) as well as aliphatic hydrocarbons and HFA, HFB and HFC-liquids. It is poor weather and ozone resistant. NBR 73 is not suitable for uses in solvents and difficult flammable hydraulic fluids. It has very good elastic properties.