

## NBR

### Mechanical, Physical and Thermal Properties

Nitrile butadiene rubber

properties	condition	standard	unit		unit	
colour				black		black
hardness	23°C/3 sec.	ISO 868	Shore A	85 ± 5	Shore A	85 ± 5
hardness	23°C/15 sec.	ISO 868	Shore A	83 ± 5	Shore A	83 ± 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 <sup>3</sup>	1280	g/cm <sup>3</sup>	1,28
rebound elasticity	23°C	DIN 53 512	%	20	%	20
abrasion	23°C	DIN 53 516	mm <sup>3</sup>	100	mm <sup>3</sup>	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/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

Copolymer, based on butadiene and acrylonitrile

Resistant to: oil, petrol and crude oil

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

Detailed information concerning chemical resistance see Chemical Resistance Guide

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