

## Nitrile butadiene rubber

### Mechanical, Physical and Thermal Properties

properties	condition	standard	unit		unit	
<b>colour</b>				<b>black</b>		<b>black</b>
<b>hardness</b>	<b>23°C</b>	ISO 868	Shore A	<b>85 ± 5</b>	Shore A	<b>85 ± 5</b>
<b>modulus 100%</b>	<b>23°C</b>	DIN 53 504	MPa	<b>≥ 11</b>	psi	<b>≥ 1595</b>
<b>tensile strength</b>	<b>23°C</b>	DIN 53 504	MPa	<b>≥ 17</b>	psi	<b>≥ 2465</b>
<b>elongation at break</b>	<b>23°C</b>	DIN 53 504	%	<b>≥ 150</b>	%	<b>≥ 150</b>
<b>tear strength</b>	<b>23°C</b>	DIN ISO 34-1	kN/m	<b>≥ 18</b>	lbf/inch	<b>≥ 102</b>
<b>spec. gravity</b>	<b>23°C</b>	ISO 1183	kg/m <sup>3</sup>	<b>1280</b>	g/cm <sup>3</sup>	<b>1,28</b>
<b>rebound elasticity</b>	<b>23°C</b>	DIN 53 512	%	<b>20</b>	%	<b>20</b>
<b>abrasion</b>	<b>23°C</b>	DIN 53 516	mm <sup>3</sup>	<b>100</b>	mm <sup>3</sup>	<b>100</b>
<b>compression set</b>	*	ISO 815	%	<b>≤ 5</b>	%	<b>≤ 5</b>
<b>compression set</b>	**	ISO 815	%	<b>≤ 6</b>	%	<b>≤ 6</b>
<b>compression set</b>	***	ISO 815	%		%	
<b>minimum service temperature</b>			°C	<b>-30</b>	°F	<b>-22</b>
<b>maximum service temperature</b>			°C	<b>110</b>	°F	<b>230</b>
<b>temp. max water/steam</b>			°C		°F	
<b>temp. max hot air</b>			°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. acides, conc.lyes and polar solvents

Foodstuff approval: -