



## Material data sheet

## NBR – black

### Nitrile Butadiene Rubber

Resistant to: oil, petrol, hot water, hot air, ozone, crude oil

<b>Properties</b>	<b>Condition</b>	<b>Standard</b>	<b>Unit</b>			
<b>Colour</b>				<b>black</b>		
<b>Hardness</b>	<b>23°C</b>	<b>ISO 868</b>	<b>Shore A</b>	<b>85+/-5</b>	<b>Shore A</b>	<b>85+/-5</b>
<b>Modulus 100%</b>	<b>23°C</b>	<b>DIN 53 504</b>	<b>MPa</b>	<b>11</b>	<b>Psi</b>	<b>1595</b>
<b>Tensile strength</b>	<b>23°C</b>	<b>DIN 53 504</b>	<b>MPa</b>	<b>17</b>	<b>Psi</b>	<b>2465</b>
<b>Elongation at break</b>	<b>23°C</b>	<b>DIN 53 504</b>	<b>%</b>	<b>150</b>	<b>%</b>	<b>150</b>
<b>Tear strength</b>	<b>23°C</b>	<b>DIN ISO 34-1</b>	<b>kN/m</b>	<b>18</b>	<b>Lbf/inch</b>	<b>102</b>
<b>Spec. Gravity</b>	<b>23°C</b>	<b>ISO 1183</b>	<b>kg/m<sup>3</sup></b>	<b>1280</b>	<b>g/cm<sup>3</sup></b>	<b>1,28</b>
<b>Rebound elasticity</b>	<b>23°C</b>	<b>DIN 53 512</b>	<b>%</b>	<b>20</b>	<b>%</b>	<b>20</b>
<b>Abrasion</b>	<b>23°C</b>	<b>DIN 53 516</b>	<b>mm<sup>3</sup></b>	<b>100</b>	<b>mm<sup>3</sup></b>	<b>100</b>
<b>Compression set</b>	<b>*</b>	<b>ISO 815</b>	<b>%</b>	<b>5</b>	<b>%</b>	<b>5</b>
<b>Compression set</b>	<b>**</b>	<b>ISO 815</b>	<b>%</b>	<b>6</b>	<b>%</b>	<b>6</b>
<b>Compression set</b>	<b>***</b>	<b>ISO 815</b>	<b>%</b>		<b>%</b>	
<b>Minimum service temperature</b>			<b>°C</b>	<b>-30</b>	<b>°F</b>	<b>-22</b>
<b>Maximum service temperature</b>			<b>°C</b>	<b>110</b>	<b>°F</b>	<b>230</b>
<b>Temp maximum water steam</b>			<b>°C</b>		<b>°F</b>	
<b>Temp maximum hot air</b>			<b>°C</b>		<b>°F</b>	
<b>*24h 70°C 25% deflection</b>	<b>**24h 100°C 25% deflection</b>			<b>***24h 150°C 25% deflection</b>		

All above stated data results from random tests which were taken from the ongoing production. All data was established based on standard test-products according to ISO, DIN and ASTM standards and can basically not be carried over to the completed seal.

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