



## Material data sheet

## H-NBR FDA black

### Hydrated nitrile butadiene rubber

suitable for higher temperatures.

H-NBR is resistant to ozone and many additives, oil, petrol, hot water, hot air, ozone, crude oil

Foodstuff approval: FDA compliant in it's active substances to § 177.2600, CFR 21 "Rubber Articles Intended for repeated use"

<i>Properties</i>	<i>Condition</i>	<i>Standard</i>	<i>Unit</i>			
<b>Colour</b>				<b>black</b>		
<b>Hardness</b>	<b>23°C</b>	<b>ISO 868</b>	<b>Shore A</b>	<b>90+/-5</b>	<b>Shore A</b>	<b>90+/-5</b>
<b>Modulus 100%</b>	<b>23°C</b>	<b>DIN 53 504</b>	<b>MPa</b>	<b>6</b>	<b>Psi</b>	<b>870</b>
<b>Tensile strength</b>	<b>23°C</b>	<b>DIN 53 504</b>	<b>MPa</b>	<b>9</b>	<b>Psi</b>	<b>1305</b>
<b>Elongation at break</b>	<b>23°C</b>	<b>DIN 53 504</b>	<b>%</b>	<b>220</b>	<b>%</b>	<b>220</b>
<b>Tear strength</b>	<b>23°C</b>	<b>DIN ISO 34-1</b>	<b>kN/m</b>	<b>20</b>	<b>Lbf/inch</b>	<b>114</b>
<b>Spec. Gravity</b>	<b>23°C</b>	<b>ISO 1183</b>	<b>kg/m<sup>3</sup></b>	<b>1320</b>	<b>g/cm<sup>3</sup></b>	<b>1,32</b>
<b>Abrasion</b>	<b>23°C</b>	<b>DIN 53 516</b>	<b>mm<sup>3</sup></b>	<b>130</b>	<b>mm<sup>3</sup></b>	<b>130</b>
<b>Compression set</b>	<b>*</b>	<b>ISO 815</b>	<b>%</b>	<b>26</b>	<b>%</b>	<b>26</b>
<b>Compression set</b>	<b>**</b>	<b>ISO 815</b>	<b>%</b>	<b>32</b>	<b>%</b>	<b>32</b>
<b>Compression set</b>	<b>***</b>	<b>ISO 815</b>	<b>%</b>		<b>%</b>	
<b>Minimum service temperature</b>			<b>°C</b>	<b>-20</b>	<b>°F</b>	<b>-4</b>
<b>Maximum service temperature</b>			<b>°C</b>	<b>150</b>	<b>°F</b>	<b>302</b>
<b>Temp maximum water steam</b>			<b>°C</b>	<b>120</b>	<b>°F</b>	<b>248</b>
<b>Temp maximum hot air</b>			<b>°C</b>	<b>180 short</b>	<b>°F</b>	<b>356 short</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.

Our applied technical advice, either oral, written or through tests is given according to our best knowledge. However, this information is to be considered as non-obligatory instruction, also in terms of any protective rights of a third party, and does not exempt you from testing our product in reference to its suitability for the intended process and purpose. Utilisation, application and processing of the products occur entirely outside of our control and are therefore exclusively your responsibility. However, should a case of liability come into question, it will be limited to all damages in the value of the product which we delivered and you used. By all means, we do warrant the impeccable quality of our products in accordance with our general sales and delivery conditions.