

**H-NBR ED** **Highly saturated nitrile butadiene rubber**  
**Mechanical, Physical and Thermal Properties**

properties	condition	standard	unit		unit	
colour				<b>black</b>		<b>black</b>
hardness	23°C	ISO 868	Shore A	<b>87 ± 5</b>	Shore A	<b>87 ± 5</b>
modulus 100%	23°C	DIN 53 504	MPa	<b>≥ 7</b>	psi	<b>≥ 1015</b>
tensile strength	23°C	DIN 53 504	MPa	<b>≥ 17</b>	psi	<b>≥ 2465</b>
elongation at break	23°C	DIN 53 504	%	<b>≥ 190</b>	%	<b>≥ 190</b>
tear strength	23°C	DIN ISO 34-1	kN/m	<b>≥ 21</b>	lbf/inch	<b>≥ 119</b>
spec. gravity	23°C	ISO 1183	kg/m <sup>3</sup>	<b>1290</b>	g/cm <sup>3</sup>	<b>1,29</b>
rebound elasticity	23°C	DIN 53 512	%	<b>30</b>	%	<b>30</b>
abrasion	23°C	DIN 53 516	mm <sup>3</sup>	<b>184</b>	mm <sup>3</sup>	<b>184</b>
compression set	*	ISO 815	%	<b>≤ 17</b>	%	<b>≤ 17</b>
compression set	**	ISO 815	%	<b>≤ 21</b>	%	<b>≤ 21</b>
compression set	***	ISO 815	%	<b>≤ 30</b>	%	<b>≤ 30</b>
minimum service temperature			°C	<b>-15</b>	°F	<b>5</b>
maximum service temperature			°C	<b>150</b>	°F	<b>302</b>
temp. max water/steam			°C	<b>110</b>	°F	<b>230</b>
temp. max hot air, short			°C	<b>180</b>	°F	<b>356</b>

\* 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, hot water, hot air, ozone and crude oil

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

Foodstuff approval: -