

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

properties	condition	standard	unit		unit	
colour				green		green
hardness	23°C	ISO 868	Shore A	85 ± 5	Shore A	85 ± 5
modulus 100%	23°C	DIN 53 504	MPa	≥ 10	psi	≥ 1450
tensile strength	23°C	DIN 53 504	MPa	≥ 20	psi	≥ 2900
elongation at break	23°C	DIN 53 504	%	≥ 190	%	≥ 190
tear strength	23°C	DIN ISO 34-1	kN/m	≥ 15	lbf/inch	≥ 85
spec. gravity	23°C	ISO 1183	kg/m <sup>3</sup>	1320	g/cm <sup>3</sup>	1,32
rebound elasticity	23°C	DIN 53 512	%		%	
abrasion	23°C	DIN 53 516	mm <sup>3</sup>	135	mm <sup>3</sup>	135
compression set	*	ISO 815	%	≤ 12	%	≤ 12
compression set	**	ISO 815	%	≤ 14	%	≤ 14
compression set	***	ISO 815	%	≤ 22	%	≤ 22
minimum service temperature			°C	-20	°F	-4
maximum service temperature			°C	150	°F	302
temp. max water/steam			°C	120	°F	248
temp. max hot air			°C	180	°F	356

\* 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