

H-NBR 90A Hydrierter Acryl-Nitrile-Butadiene Kautschuk
Mechanical, Physical and Thermal Properties

properties	condition	standard	unit		unit	
colour				black		black
hardness	23°C	ISO 868	Shore A	90 ± 5	Shore A	90 ± 5
modulus 100%	23°C	DIN 53 504	MPa	≥ 6	psi	≥ 870
tensile strength	23°C	DIN 53 504	MPa	≥ 9	psi	≥ 1305
elongation at break	23°C	DIN 53 504	%	≥ 220	%	≥ 220
tear strength	23°C	DIN ISO 34-1	kN/m	≥ 20	lbf/inch	≥ 114
spec. gravity	23°C	ISO 1183	kg/m ³	≥ 1450	g/cm ³	≥ 1,45
rebound elasticity	23°C	DIN 53 512	%	30	%	30
abrasion	23°C	DIN 53 516	mm ³	130	mm ³	130
compression set	*	ISO 815	%	≤ 26	%	≤ 26
compression set	**	ISO 815	%	≤ 32	%	≤ 32
compression set	***	ISO 815	%		%	
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, short			°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

Foodstuff approval: FDA compliant

Maximum recommended service temperature (FDA applications): 90°C