

T-NBR Nitrile butadiene rubber for low temperature applications
 Mechanical, Physical and Thermal Properties

properties	condition	standard	unit		unit	
colour				black		black
hardness	23°C	ISO 868	Shore A	80 ± 5	Shore A	80 ± 5
modulus 100%	23°C	DIN 53 504	MPa	≥ 9	psi	≥ 1305
tensile strength	23°C	DIN 53 504	MPa	≥ 14	psi	≥ 2031
elongation at break	23°C	DIN 53 504	%	≥ 140	%	≥ 140
tear strength	23°C	DIN ISO 34-1	kN/m	≥ 15	lbf/inch	≥ 85
spec. gravity	23°C	ISO 1183	kg/m ³	1270	g/cm ³	1,27
rebound elasticity	23°C	DIN 53 512	%	50	%	50
abrasion	23°C	DIN 53 516	mm ³		mm ³	
compression set	*	ISO 815	%	≤ 6	%	≤ 6
compression set	**	ISO 815	%	≤ 9	%	≤ 9
compression set	***	ISO 815	%		%	
minimum service temperature			°C	-50	°F	-58
maximum service temperature			°C	110	°F	230
temp. max water/steam			°C		°F	
temp. max hot air			°C		°F	

* 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 and crude oil

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