

Short designation	NBR
Brand name	Perbunan® Buna N®
Chemical description	Nitrile butadiene rubber
Mechanical properties	
Hardness range [Shore A/D]	40 - 90
Wear resistance	good – very good
Tensile strength [MPa]	10 - 25
Physical properties	
Density [g/cm³]	1.4
Application temperatures	
Temperature range, short-term [°C]	-40 - 120
Temperature range, continuous [°C]	-30 - 100
Other properties	
Flammability according to UL 94	burns (still HB)
Chemical resistance	
Mineral grease and oils	++
Petrol	++
Weak/strong acids	o / - -
Weak/strong alkalis	+ / -
Perchloroethylene	-
Trichloroethylene	- -
Acetone	- -
Alcohols	+
Brake fluid	-
Hydrolysis resistance (hot water)	+

Weather/UV radiation	o
Main users	<p>NBR is an acrylonitrile and butadiene-based rubber.</p> <p>The material has good mechanical properties and greater abrasion resistance than most other elastomers.</p> <p>Due to its excellent resistance to mineral oils, oil and water emulsions and many fuel types, NBR used to be the standard material for O-rings and dynamic seals.</p>

++ very good / + good / o satisfactory / - moderate (significant change to properties) / -- unsuitable