

NBR

CHARACTERISTICS OF THE BASE ELASTOMERS:

CURRENT NAME: **Nitrile Rubber NBR**

TRADE NAME: **Perbunan N, Europrene N.**

It's a butadiene-acrylonitrile copolymer, the ACN percentage can vary from 18% to 50%.

CHARACTERISTICS

- Good mechanical properties
- Good resistance to permanent deformation for compression (compression-set)
- Good impermeability to air and gases
- Easy coloured
- Limited resistance to UV rays
- Limited dielectric properties
- No resistance to fuel

MATERIALS	HARDNESS Shore A	Lowest tensile strength N/mm ²	Elongation at break.	Permanent deformation to compression in air according to DIN 53517 24 h (+100 °C) 24h (+120 °C)		Working temperature °C	Temperature for continuous fragility increase °C ASTM D 746
NBR	60	15.5	300	≤ 15	≤ 20	95	- 40
NBR	70	14.5	250	≤ 15	≤ 20	95	- 40
NBR	80	15.0	200	≤ 15	≤ 20	95	- 40

COMPATIBILITY AND CHEMICAL BEHAVIOUR

■ *Good resistance:*

- Oils and mineral fats
- Light combustible oils, diesel oil
- Aliphatic hydrocarbons
- Oils and animal and vegetal fats
- Hot water (+ 100 °C), sea water, saline solutions

■ *Medium resistance:*

- Fuels rich in aromatics
- Some types of Freon
- Acid dilute solutions
- Hydraulic fluids with petroleum base
- Syntetic lubricants with diesters base

■ *Low resistance:*

- Benzene and chlorinated hydrocarbons
- Aromatic hydrocarbons (benzol)
- Hydraulic fluids with phosphoric esters base
- Different liquids for brakes with a glycol base

- It's possible to make mixtures with specific formula in order to optimize their chemical-physical characteristics to improve the performance in heavy uses.
- We make mixtures to use in contact with food.