

M SEALS NBR-B85

General purpose 85A Nitrile Rubber



MATERIAL DATA SHEET (Version 6.0 – 05.2022)

Description

NBR-B85 is a general purpose 85a Shore Nitrile Butadiene Rubber (NBR85), commonly referred to as NBR, Nitrile or BUNA-N.

Good physical characteristics and chemical resistance to the most common hydraulic industry fluids such as Mineral Oils, HFA, HFB and HFC make NBR-B85 a suitable seal material in many industrial applications.

Care should be taken when using Nitrile in water or water-based fluids at elevated temperatures above 40°C, in some instances base ingredients within the fluid can become aggressive and cause material degradation. Talk to our technical team if you require further advice.

Physical Properties

Property	Test method	Unit	Typical value
Colour			Black
Density	ISO 1183-1	g/cm ³	1.31
Hardness @ 23°C	ISO 7619-1	Shore A	85 (+/-5)
Tensile Strength	DIN 53504	N/mm ²	15.6
100% Modulus	DIN 53504	N/mm ²	12.7
Elongation at break	DIN 53504	%	169
Tear Strength	ISO 34-1B	N/mm	19.9
Compression set (24 Hours @ 70°C, 25%)	ISO 815-1	%	6.2
Compression set (24 Hours @ 100°C, 25%)	ISO 815-1	%	12.5
Minimum service temperature		°C	-25
Maximum service temperature		°C	+100

Main Characteristics

- Good fluid resistance
- Good compression set resistance
- Good physical properties
- Excellent availability
- Useful temperature range

Typical Products

- U-Seals / U-Rings
- T-Seals
- Wiper seals
- O-Rings
- Bespoke parts

Typical Applications

Due to its useful temperature capability, good physical and mechanical properties along with resistance to the most common hydraulic fluids, oils and fuels, NBR-B85 is typically used to create Wiper seals, U-Seals, Piston Seals and O-Rings for a variety of fluid sealing applications.