Material Data Sheet N107-B85
NBR N107 – black (sulphur cross linked)

General

N107-B85 is a black Nitrile Butadiene Rubber commonly referred to as NBR, Nitrile or BUNA. Because of its good physical characteristics and chemical resistance to the most common hydraulic fluids NBR is excellently suitable for sealing material. NBR materials are one of the most used elastomers in sealing applications.

Physical properties

Density:	DIN 53479	g/cm³	1,31	±0,03
Hardness at 23°C:	DIN 53505	Shore A	85	±5
100% Modulus:	DIN 53504	N/mm²	12,7	*
Tensile strength:	DIN 53504	N/mm²	15,6	*
Elongation at break:	DIN 53504	%	156,7	*
Tear resistance:	DIN 53515	kN/m	49,1	*
Rebound resiliance:	DIN 53512	%	25,0	*
Compression set, 24h, 70°C, 25%:	DIN 53517	%	6,2	*
Compression set, 24h, 100°C, 25%:	DIN 53517	%	<25	

* mentioned values are subject to a tolerance of +/- 25%

Temperature range: -25°C to 100°C

Chemical resistance

Resistant to:	Water up to 70°C, HFA, HFB, HFC Fluids, mineral/vegetable oils, Diesel fuel, Gasoline Fuel, Alcohols
Not Resistant to:	Steam, HFD Fluids, Ozone, Oxygen

Main application

Static and dynamic seals (standard and special), wipers, O-rings, flange seals, rotary seals, rubber energizers (preload elements). General applications in petroleum fluids, water, greases, mineral oils.

Analysis and Evaluation

Values mentioned above are based on several tests performed during development and production of the material. Tests have been performed on standard test pieces specified within the relevant standard within the laboratory. Tests performed on any other pieces which are not related to the corresponding standard or made out of any (semi)finished part or any other part deviating in production process, dimension or age of the material from above may result in different values. The data represent our present empirical values and do not disengage the processor or user from his obligation to examine the usage of the material for his specific application.

We reserve the right to update this data sheet from time to time if new empirical values are available. Errors and omissions excepted.   V2.0