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## **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/cm <sup>3</sup>	1,31	±0,03
Hardness at 23°C:	DIN 53505	Shore A	85	±5
100% Modulus:	DIN 53504	N/mm <sup>2</sup>	12,7	*
Tensile strength:	DIN 53504	N/mm <sup>2</sup>	15,6	*
Elongation at break:	DIN 53504	%	156,7	*
Tear resistance:	DIN 53515	kN/m	49,1	*
Rebound resilience:	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.