



Via Emilia,292 – 40068 San Lazzaro di Savena (BO)

Tel. 0516258101/102 – Fax. 0516258098

[www.sixten.it](http://www.sixten.it) – [sixten@sixten.it](mailto:sixten@sixten.it)

## **Material Data Sheet HN112-B85**

### **H-NBR HN112 – black (peroxide cross linked)**

#### **General**

HN112-B85 is a black hydrogenated acrylonitrile-butadiene-rubber commonly referred to as H-NBR. Due to its good physical characteristics and chemical resistance to the most common hydraulic fluids it is an excellently suitable sealing material for a wide range of applications. H-NBR materials are often used in vegetable and animal oils as well as in highly addivated oils, sour oils/gases (H<sub>2</sub>S) and crude oils.

#### **Physical properties**

Density:	DIN 53479	g/cm <sup>3</sup>	1,23	±0,03
Hardness at 23°C:	DIN 53505	Shore A	83	±5
100% Modulus:	DIN 53504	N/mm <sup>2</sup>	9,5	*
Tensile strength:	DIN 53504	N/mm <sup>2</sup>	19,3	*
Elongation at break:	DIN 53504	%	241,5	*
Tear resistance:	DIN 53515	kN/m	55,9	*
Rebound resilience:	DIN 53512	%	28,0	*
Compression set, 24h, 70°C, 25%:	DIN 53517	%	15,0	*
Compression set, 24h, 100°C, 25%:	DIN 53517	%	13,5	*
Compression set, 24h, 150°C, 25%	DIN 53517	%	22,1	*

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

**Temperature range:** -25°C to 150°C

#### **Chemical resistance**

Resistant to: Water up to 90°C, HFA, HFB, HFC Fluids, Mineral Oils, Vegetable Oils, Diesel Fuel, Ozone, Alcohols, Air up to 80°C

Not Resistant to: Steam

#### **Main application**

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