

AF1203 Data Sheet N111-W85

NBR-FDA N111 – White (Sulphur Cross Linked)

General

N111-W85 is a white Nitrile Butadiene Rubber commonly referred to as NBR, Nitrile or BUNA. Good physical characteristics and chemical resistance to the most common hydraulic fluids makes NBR an excellent sealing material. NBR materials are one of the most used elastomers in sealing applications. NBR-FDA N111 – white is approved for the use of applications in contact with foodstuff.

Physical Properties

Density:	DIN 53479	g/cm ³	1,36
Hardness at 20°:	DIN 53505	Shore A	85 +/-5
Tensile strength:	DIN 53504	N/mm ²	7,9 +/-15%
Elongation at break:	DIN 53504	%	305 +/-20%
Modulus 100%:	DIN 53504	N/mm	4,5 +/-30%
Tear strength	DIN 53507B	N/mm	7,6
Compression set: 70h/RT	DIN 53517A	%	21 +/-20%
Compression set: 22h/70°C	DIN 53517A	%	23 +/-20%
Compression set: 22h/100°C	DIN 53517A	%	29 +/-20%
Min. service temperature:		°C	-22
Max. service temperature:		°C	100
Short time max. service temp. in air		°C	110

*Compression set: 25% deflexion, 22 hours at 70°C

Chemical Resistance

Water up to 70°	R	Diesel Fuel	R
Water up to 90°	S	Gasoline Fuel	S
Steam	U	Alcohols	R
HFA, HFB, HFC Fluids	R	Ozone, Oxygen	U
HFD Fluids	U	Air up to 100°	R
Mineral/Vegetable Oils	R	Air up to 150°	U
Silicone oils	S		

Key to chemical resistance: R = resistant S = suitable U = unsuitable

Main application

Static and dynamic seals (standard and special), wipers, O-rings, back-up rings, flange seals, rotary seals, low friction and wear, high extrusion resistance, compatibility with water, excellent low temp. characteristics.

Analysis and Evaluation

The properties relate to fundamental values for polyurethane products. Values mentioned above are corresponding to ASTM or DIN standards and have been tested on standardized plates in the laboratory. All immersion tests are made under laboratory conditions.

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All information is based on typical test results performed under specific conditions and limited sample size. This does not represent a legally binding guarantee of certain properties or the suitability for specific applications. All information is provided in good faith at time of print.

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