



Technical data sheet

Rev. 10/2025

H-NBR 83 ShA green

Hydrogenated acrylnitrile-butadiene-rubber

Properties	Value	Unit	DIN Standard
Hardness	83±5	Shore A	DIN ISO 7619-1
Density	1,42	g/cm ³	DIN EN ISO 1183-1
100% Modulus	7,4	Mpa	DIN 53504
Elongation at break	175	%	DIN 53504
Tensile strength	12	Mpa	DIN 53504
Compression set 23°C/70h	8,2	%	DIN ISO 815-1
Compression set 70°C/22h	13,6	%	DIN ISO 815-1
Rebound resilience	28	%	DIN ISO 4662:2017
Tear strength	13,1	kN/m	DIN ISO 34-1 A
Abrasion resistance	120	mm ³	DIN ISO 4649 B
Min. Service temperature	-20	°C	
Max. Service temperature	+150	°C	

Advantages and stability:

- **HNBR (hydrogenated nitrile) compound approved for food contact applications**, compliant with FDA standards and recommended for conformity with EU Regulation 1935/2004. Designed for use in food processing, beverage, and industrial environments requiring both chemical resistance and mechanical durability.
- **Excellent resistance** to mineral oils, HFC fluids, and cold water, providing reliable sealing performance even under exposure to aggressive media and temperature fluctuations.
- **High mechanical strength and wear resistance**, ensuring long service life in dynamic sealing applications.
- Applicable for rod and piston seals, wiper seals, rotary seals, and static sealing elements.
- **Well-balanced performance** between elasticity, chemical compatibility, and temperature resistance, making it a versatile choice for a broad range of industrial uses.

Foodstuf approval:

FDA-aproved*

EU Regulation 1935/2004*

*The user is responsible for performing the necessary tests to confirm that the above-mentioned material is suitable for use in pharmaceutical and medical applications.

All data provided above are based on random samples taken from our ongoing production. The results were determined using standard test specimens in accordance with ISO, DIN, and ASTM methods. These results cannot be directly applied to specific finished components.

Any technical information or advice we provide—whether verbal, written, or based on testing—is given to the best of our knowledge. Nevertheless, this information should be regarded as non-binding guidance and does not release the user from the obligation to verify the suitability of our products for their intended process or application. Possible third-party property rights must also be observed.

Since the use, application, and processing of our products take place beyond our control, they remain solely the responsibility of the user. In any case where liability may arise, it shall be limited to damages not exceeding the value of the product supplied and used.

We do, however, guarantee the flawless quality of our products in accordance with our general terms and conditions of sale and delivery.

