

HNBR



Standard Compounds for Machined Seal

HNBR Hydrogenated AcryloNitrile Butadiene Rubber

Hydrogenated NBR elastomer is formed by the selective hydrogenation of acrylonitrile-butadiene rubber (NBR). In this process the double bonds are removed from the NBR, making the polymer more resistant to oxygen and increasing its heat resistance significantly. In contrast to NBR, hydrogenated NBR elastomer also offers improved wear resistance in dynamic applications and increased ageing resistance.

Features

- Excellent compression set resistance
- Superior heat resistance
- Excellent resistance to petroleum oils, greases, and fuels
- Good low temperature performance

Compound		S24 H02	S24 H01	S24 H03	
Features		FDA compliant	Green in Color	Anti Explosive Decompression	
Color		Black	Green	Black	
Hardness ISO 868	Shore A	87	85A	87	
Minimum Temperature	°F	-4	-4	5	
Maximum Temperature	°F	302	302	302	
Modulus @ 100% DIN 53504	psi	≥ 870	≥ 1450	≥ 1015	
Tensile Strenght DIN 53504	psi	≥ 1305	≥ 2900	≥ 2465	
Elongation @ Break DIN 53504	%	≥ 220	≥ 190	≥ 190	
Tear Strenght DIN ISO 34-1	lbf/inch	≥ 114	≥ 85	≥ 119	



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Compound		S24 H02	S24 H01	S24 H03	
Specific Gravity ISO 1183	g/cm³	1.45	1.32	1.29	
Rebound Elasticity DIN 53512	%	30	29	30	
Abrasion DIN 53516	mm²	130	135	184	
Compression Set ISO 815 24h 158 °F 25% def	%	≤ 26	≤ 12	≤ 17	
Compression Set ISO 815 24h 212 °F 25% def	%	≤ 32	≤ 14	≤ 21	
Compression Set ISO 815 24h 302 °F 25% def	%		≤ 22	≤ 30	

TEST DATA ONLY - DO NOT USE FOR SPECIFICATION

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