

Technical data sheet in accordance with ASTM

Material

HNBR HN901809

black

cross linking: peroxidic

Reference tests according to John Deere JDM H4D

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Physical properties	nominal range	typical values	
Density CNS 5341-96	1.29 ±0.03	1.28	g/cm ³
Hardness ASTM D2240-15, Shore A	90 ±5	88	Shore
Tensile strength ASTM D412-16	---	28.9	MPa
Elongation at break ASTM D412-16	---	117	%
Modulus 100 %, ASTM D412-16	---	25.8	Psi
Compression set ASTM D395-18, Slab B, 22 h, 150 °C, plied	---	16	%
Temperature range	-40°C to 150°C		

Declarations of conformity

This overview is purely informative and does not constitute a declaration of conformity (DoC). Please refer to the actual declaration of conformity (DoC) including the conditions and its validity period.

Country	Part	Remark	Expires
Info ROHS and ELV		EU 2000/53 (ELV) including EU 2011/65 and EU2015/863 (ROHS III)	see DoC

Change after aging in Air: 70h/150°C

		Typ. values		
		Base value	After aging	difference
Hardness (ASTM D865-11, Shore A)	Shore	88	90	2
Tensile strength (ASTM D865-11)	MPa	28.9	28.3	-2 %
Elongation at break (ASTM D865-11)	%	117	111.1	-5 %
weight change	%		0.3	

Freudenberg

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Change after aging in IRM 901: 70h/150°C

Hardness (ASTM D471-16a, Shore A)
Tensile strength (ASTM D471-16a)
Elongation at break (ASTM D471-16a)
volume change (ASTM D471-16a)

Shore
MPa
%
%

Typ. values			
Base value	After aging	difference	
88	87	-1	
28.9	28.6	-1 %	
117	107.6	-8 %	
	1.1		

Change after aging in IRM 903: 70h/150°C

Hardness (ASTM D471-16a, Shore A)
Tensile strength (ASTM D471-16a)
Elongation at break (ASTM D471-16a)
volume change (ASTM D471-16a)

Shore
MPa
%
%

Typ. values			
Base value	After aging	difference	
88	81	-7	
28.9	26	-10 %	
117	101.8	-13 %	
	13.4		

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No ASTM D2000 properties available

Low-Temperature (JDQ 112): 5 Hrs @ -40°C, no crack, pass

High-Temperature Resistance (JDQ 112): 5 Hrs @ 125°C, no crack, pass

The given values are based on a limited number of tests on standard test pieces (2mm sheets). The data from finished parts can deviate from above values depending on the manufacturing process and the component geometry.

The data represents our present empirical values. It is incumbent on the person placing the order to examine whether it is suitable for its intended purpose, before using the product. All questions regarding the guarantee of this product are in line with our terms and conditions, inasmuch as statutory provisions do not plan for something else.

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