

## DATASHEET

DATASHEET		Date: 18-08-2020 Version: 4.0
<b>CH No.</b>	<b>MDS CH334128</b>	
Basic elastomer	Nitrile Rubber (NBR)	
Colour	Black	
Temperature range	From -25°C to +100°C	
Approvals	RoHS (UE/2015/53) • VHU (2000/53) • SVHC Free • Phthalate Free • CLP • FDA • ADI	

TYPICAL PROPERTIES				
Properties	Unit	Required	Value	Testing methods
Hardness	IRHD	80 ±5	82	ASTM D1415
Tensile strength	MPa	> 14	21.34	ASTM D412C
Maximum elongation	%	> 125	171	ASTM D412C
Modulus 100	MPa	-	13.23	ASTM D412
Compression set in air 22 hours at 100°C	%	< 25	13.9	ASTM D395B
Tear Strangth	N/mm	-	35.67	ASTM D624B

AGEING IN AIR 70 HOURS AT 100°C				
Test:	Unit	Required	Value	Testing methods
Traction	%	-	-7	-
Maximum Elongation	%	-	-14	-
Harness	IRHD	-	0	-
Volume	%	-	0	-

AGEING ASTM 1 70 HOURS AT 100°C				
Test:	Unit	Required	Value	Testing methods
Traction	%	-25 ≤	-4	-
Maximum Elongation	%	-45 ≤	-12	-
Harness	IRHD	-5 ≤ x ≤ 10	0	-
Volume	%	-10 ≤ x ≤ 5	-1.6	-

AGEING ASTM 3 70 HOURS AT 100°C				
Test:	Unit	Required	Value	Testing methods
Traction	%	-45 ≤	-1	-
Maximum Elongation	%	-45 ≤	-4	-
Harness	IRHD	-10 ≤ x ≤ 5	-9	-
Volume	%	0 ≤ x ≤ 35	10.2	-

**AGEING WATER 70 HOURS AT 100°C**

Test:	Unit	Required	Value	Testing methods
Traction	%	-	6	-
Maximum Elongation	%	-	0	-
Harness	IRHD	$-10 \leq x \leq 10$	-2	-
Volume	%	$-15 \leq x \leq 15$	4.5	-

**AGEING FUEL A 70 HOURS AT 23°C**

Test:	Unit	Required	Value	Testing methods
Traction	%	$-25 \leq$	-8	-
Maximum Elongation	%	$-25 \leq$	-8	-
Harness	IRHD	$-10 \leq x \leq 10$	-2	-
Volume	%	$-5 \leq x \leq 10$	1.2	-

**AGEING FUEL B 70 HOURS AT 23°C**

Test:	Unit	Required	Value	Testing methods
Traction	%	$-60 \leq$	-18	-
Maximum Elongation	%	$-60 \leq$	-48	-
Harness	IRHD	$-30 \leq x \leq 0$	-15	-
Volume	%	$0 \leq x \leq 40$	26	-

**COMPOSITION**

Element	Component	Symbol	Avg %	Mini %	Maxi %	SVHC	GADSL
Elastomer	Zinc oxide	ZnO	2.22	-	-	No	D/P
Elastomer	Tetramethylthiuramdisulfide	TMTD	0.45	-	-	No	D

**General:**

NBR rubber is above all effective against oils, especially hydraulic oils, lubricants, petrol and other aliphatic hydrocarbons, diluted acids and alkalis.

Good physical characteristics such as abrasion resistance and collapse resistance and a wide temperature range guarantee

Wide application for this type of rubber

**Please Note:**

The mentioned values are average values and result from a limited number of laboratory tests. These tests were performed on standard test specimens and may therefore vary significantly from the values that were determined by means of tests performed on finished parts. On the basis of his own tests, the purchaser must ensure that the product is suitable for the intended application purpose. Our recommendations are provided according to the best of our knowledge. However, they are not binding and exclude any form of liability for any kind of damage.