NES Material Data Sheet MC203 Silicone 75 Shore FDA Red

> Apr-2022 **Revision:** 5

MATERIAL	Silicone 75 Shore FDA and 3A Red ASTM D 2000 M2GE 707 A1 9B37E036
DESCRIPTION	Low compression set Silicone O ring extrusion grade material FDA compliant to CFR 21 177-2600 & European regulations EC1935/2004 3-A 18-03 Class 1 compliant (except for tensile strength) Meets EN10/2011
APPLICATION	This material has excellent thermal resistance to both high and low temperatures, is good with oxygen and ozone attack and has a very high permeability resistance.
TEMPERATURE	Low temperature service limit -76°F (-60°C) Upper temperature continuous service limit +446°F (+230°C)
PRODUCTS	Encapsulated Seals Extrusions (cords/profiles/tubes) Hot Vulcanised O rings & Profiles

PHYSICAL PROPERTIES

ORIGINAL	STANDARD	TYPICAL VALUES
Specific Gravity	ASTM D1817	1.58
Durometer shore A (slab)	ASTM D2240	74
Elongation % (Dumbbell)	ASTM D412	159
Tensile strength PSI (MPa) (Dumbbell)	ASTM D412	1174 (8.1)
Compression set % 22h @ 347°F (175°C) (slab)	ASTM D395B	9.6

HEAT AGEING 70h @ 437°F (225	°C) ASTM D573
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Durometer change points shore A	-1
Elongation change %	-20
Tensile strength change PSI (MPa)	-217 (-1.5)
Weight loss grams	0
FUUE IMMEDIAN OUN 2 704 @ 20205 (15000) ACTM D471	
FLUID IMMERSION Oil No 3 70h @ 302°F (150°C) ASTM D471	
Volume change %	+29
	+29 -20
Volume change %	- 20

Information

The above information corresponds to our current knowledge and is offered solely to provide possible suggestions for your own experimentations. It is not intended to substitute any testing you may need to conduct to determine suitability of our products for your end use. Northern Engineering reserves the right to revise this information as new knowledge and experience becomes available. Northern Engineering makes no warranties and assumes no liability in connection with any use of the above information.



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