NES Material Data Sheet

MC330 Silicone 70 Shore Metal/X-Ray Detectable FDA Blue

Apr-2022 **Revision:** 6

MATERIAL	Silicone 70 Shore Metal/X-Ray Detectable FDA & 3-A Blue ASTM D 2000 M2GE 704 A19B37E036		
DESCRIPTION	FDA compliant to CFR 21 177-2600 & European regulations EC1935/2004 3-A 18-03 compliant to Class 1 Meets EN10/2011		
APPLICATION	This material has excellent thermal resistance to both high and low temperatures and is good with oxygen and ozone attack. This compound can be detected by metal detectors and X-Ray detectors.		
TEMPERATURE	Low temperature service limit -76°F (-60°C) Upper temperature continuous service limit +428°F (+220°C)		
PRODUCTS	Extrusions (cords/profiles/tubes) Hot Vulcanised O rings Moulding (custom/O rings)		
PHYSICAL PROPI	ERTIES		
	ORIGINAL	STANDARD	TYPICAL VALUES
	Specific Gravity	ASTM D1817	1.33
	Durometer shore A (slab)	ASTM D2240	69
	Elongation % (Dumbbell)	ASTM D412	167
	Tensile strength Psi (Mpa) (Dumbbell)	ASTM D412	681 (4.7)
	Compression set % 22h @ 347°F (175°C) (slab)	ASTM D395B	14.8
	HEAT AGEING 70h @ 437°F (225°C) ASTM D573		
	Durometer change points shore A		-2
	Elongation change %		-18
	Tensile strength change Psi (Mpa)		-14 (-0.3)
	Weight loss %		1.6
	FLUID IMMERSION Oil No 3 70h @ 302°F (150°C)	ASTM D471	
	Volume change %		+37.0
	Durometer change points shore A		-13
	Elongation change %		-20
	Tensile strength change Psi (Mpa)		-160 (-1.1)

Sample tests were carried out on a Mettler Toledo Advanchek 300 machine, tests were carried out on a standard head 350mm wide x 175mm high, frequency at both 100 Khz and 300Khz, samples down to 2mm were detected.

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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