**NES** Material Data Sheet

MC311 EPDM 65 Shore Metal/X-Ray Detectable FDA Blue

Apr-2022 **Revision: 8** 

MATERIAL	EPDM 65 Shore Metal/X-Ray Detectable FDA Blue ASTM D 2000 M2CA 710 A25		
DESCRIPTION	EPDM is a polymer of ethylene, propylene and a small amount of diene Cure system is peroxide FDA compliant to CFR 21 177-2600 & European regulations EC1935/2004 3-A 18-03 compliant Class 3 (except for milk fat test) Meets EN10/2011		
APPLICATION	EPDM's have good resistance to ozone, ageing a for HFC & HFD flame retardant hydraulic oils an resistance to hot water, steam and acids. This co detectors and X-Ray detectors.	d brake fluids an	d have exceptional
TEMPERATURE	Low temperature service limit -40°F (-40°C) Upper temperature continuous service limit +248°F (+120°C)		
PRODUCTS	Extrusions (cords/profiles/tubes) Hot Vulcanised O rings & Profiles Moulding (custom/O rings)		
PHYSICAL PROPI			
	ORIGINAL	STANDARD	TYPICAL VALUES
	Specific Gravity	ASTM D1817	1.60
	Durometer shore A (slab)	ASTM D2240	67
	Elongation % (Dumbbell)	ISO37, type 2	349
	Tensile strength Psi (Mpa) (Dumbbell)	ISO37, type 2	1261 (8.7)
	Compression set % 22h @ 158°F (70°C) (slab)	ISO815-1B	13
	HEAT AGEING 70h @ 212°F (100°C) ASTM D573		
	Durometer change points shore A		+2
	Elongation change %		-13
	Tensile strength change Psi (Mpa)		-102 (-0.7)
	Weight loss %		0.2
	FLUID IMMERSION Oil No 3 70h @ 212°F (100°C)	ASTM D471	
	Volume change %		+134
	Durometer change points shore A		-38
	Elongation change %		-16
	Tensile strength change Psi (Mpa)		-551 (-3.8)

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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