## NES Material Data Sheet MC281 EPDM 65 Shore FDA Black

Feb-2019

**Revision: 3** 

MATERIAL	EPDM 65 Shore FDA Black ASTM D 2000 M2CA 12 A25 B35
DESCRIPTION	EPDM is a polymer of ethylene, propylene and a small amout of diene FDA compliant to CFR 21 177-2600 Cure system is sulphur
APPLICATION	EPDM's have a good resistance to ozone, ageing and weathering. They are suitable for HFC & HFD flame retardant hydraulic oils and brake fluids and have exceptional resistance to hot water, steam and acids.
TEMPERATURE	Low temperature service limit -40°F (-40°C) Upper temperature continuous service limit +284°F (+140°C)
PRODUCTS	Extrusions (cords/profiles/tubes) Hot Vulcanised O rings & Profiles Moulding (custom/O rings)

## **PHYSICAL PROPERTIES**

ERITES			
ORIGINAL	STANDARD	TYPICAL VALUES	
Specific Gravity	ASTM D1817	1.11	
Durometer shore A (slab)	ASTM D2240	66	
Elongation % (Dumbbell)	ASTM D412	328	
Tensile strength Psi (Mpa) (Dumbbell)	ASTM D412	1638 (11.3)	
Compression set % 22h @ 212°F (100°C) (slab)	ASTM D395B	11.13	
HEAT AGEING 70h @ 257°F (125°C) ASTM D573			
Durometer change points shore A	No change		
Elongation change %	-5.9		
Tensile strength change Psi (Mpa)	-25 (0.171.5)		
Weight loss grams	0.02		
FLUID IMMERSION Oil No 3 70h @ 302°F (150°C) ASTM D471			
Volume change %	N/A		
Durometer change points shore A	-27		
Elongation change %	-23		
Tensile strength change Psi (Mpa)	-1242 (-8.57)		

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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