## NES Material Data Sheet MC307 Viton™ 'A' 70 Shore FDA/3-A/USP B

Apr-2022 Revision: 6

MATERIAL	Viton™ 'A' 70 Shore FDA/3-A/USP Class VI Black ASTM D 200 M2HK 715 B37
DESCRIPTION	Low compression set Viton™ O ring grade Copolymer with 66% fluorine content Cure system is Bisphenol FDA compliant to CFR 21 177-2600 USP Class VI Part 88
APPLICATION	This material has excellent resistance to oils, fuels, lubricants, most mineral acids aliphatic and aromatic hydrocarbons. Approved to USP Class VI and 3-A Sanitary Class 1, is USP biological reactivity tested in vivo and extraction tested to 121°C and is FDA compliant to CFR 21 177-2600.
TEMPERATURE	Low temperature service limit +5°F (-15°C) Upper temperature continuous service limit +400°F (+204°C)
PRODUCTS	Encapsulated Seals Extrusions (cords/profiles/tubes) Hot Vulcanised O rings

## PHYSICAL PROPERTIES

ORIGINAL	STANDARD	TYPICAL VALUES	
Specific Gravity	ASTM D1817	1.99	
Durometer shore A (slab)	ASTM D2240	67	
Elongation % (Dumbbell)	ASTM D412	409	
Tensile strength Psi (Mpa) (Dumbbell)	ASTM D412	1746 (12)	
Compression set % 22h @ 347°F (175°C) (slab)	ASTM D395B	6.8	
Low temperature TR-10 °F (°C)*	ASTM D1329	1.4 (-17)	
*Nominal value based on a typical 75 shore vulcanizate			
HEAT AGEING 70h @ 392°F (200°C) ASTM D573			
Durometer change points shore A		+2	
Elongation change %		-29	
Tensile strength change Psi (Mpa)	+145 (+1.0)		
Weight loss %	0.3		
FLUID IMMERSION ASTM 3 70h @ 302°F (150°C) ASTM D471			
Volume change %	+1.2		
Durometer change points shore A	0		
Elongation change %	+56		
Tensile strength change Psi (Mpa)	-145 (-1.0)		

## 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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