NES Material Data Sheet MC161 Nitrile 60 Shore Black

March-25 Revision: 4

MATERIAL	Nitrile 60 Shore Black ASTM D 2000 M2BG 610 B14 EO34
DESCRIPTION	NBR Acrylonitrile-Butadiene-Rubber ACN content is 33% Cure system is sulphur
APPLICATION	This material has excellent resistance to aliphatic hydrocarbons (e.g. propane, butane and petroleum), mineral oils/greases, vegetable/animals oils/greases, heating oil and diesel fuel.
TEMPERATURE	Low temperature service limit -22°F (-30°C) Upper temperature continuous service limit +248°F (+120°C)
PRODUCTS	Extrusions (cords/profiles/tubes) Hot Vulcanised O rings Moulding (custom/O rings)

PHYSICAL PROPERTIES

ORIGINAL	STANDARD	TYPICAL VALUES	
Specific Gravity	ASTM D1817	1.27	
Durometer shore A (slab)	ASTM D2240	55	
Elongation % (Dumbbell)	ASTM D412	564	
Tensile strength Psi (Mpa) (Dumbbell)	ASTM D412	1406 (9.7)	
Compression set % 22h @ 212°F (100°C) (slab)	ASTM D395B	41.8	
HEAT AGEING 70h @ 212°F (100°C) ASTM D573			
Durometer change points shore A	+5		
Elongation change %	-28		
Tensile strength change Psi (Mpa)	-58 (-0.4)		
FLUID IMMERSION Oil No 3 70h @ 212°F (100°C) ASTM D471			
Volume change %	+4.3		
Durometer change points shore A	+2		
Elongation change %	-60		
Tensile strength change Psi (Mpa)	-275 (-1.9)		

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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