NES Material Data Sheet MC161 Nitrile 60 Shore Black

Feb-2019

Revision: 3

MATERIAL	Nitrile 60 Shore Black ASTM D 2000 M2BG 610 B14 EO34
DESCRIPTION	NBR Acrylonitrile-Butadiene-Rubber ACN content is 33%
APPLICATION	Cure system is sulphur 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 @ 302°F (150°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

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