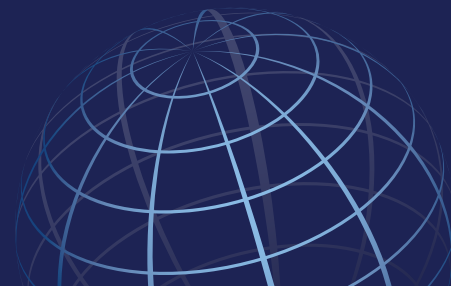




# Material Data Sheet

## MC238 NBR 75 Shore Black



Feb-2019 Revision: 6

**MATERIAL** NBR 75 Shore Black  
ASTM D 2000 M2BG 718 A14B14E034

**DESCRIPTION** NBR (Acrylonitrile-Butadiene-Rubber)  
ACN content is 34%  
Cure system is sulphur

**APPLICATION** This material has excellent resistance to aliphatic hydrocarbons (e.g. propane, butane and petroleum), mineral oils/greases, vegetable/animal 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 & Profiles  
Moulding (custom/O rings)

### PHYSICAL PROPERTIES

ORIGINAL	STANDARD	TYPICAL VALUES
Specific Gravity	ASTM D1817	1.27
Durometer shore A (slab)	ASTM D2240	79
Elongation % (Dumbbell)	ASTM D412	310
Tensile strength PSI (MPa) (Dumbbell)	ASTM D412	2757 (19)
Compression set % 22h @ 212°F (100°C) (slab)	ASTM D395B	18
<b>HEAT AGEING 70h @ 212°F (100°C) ASTM D573</b>		
Durometer change points shore A		+4
Elongation change %		-23
Tensile strength change PSI (MPa)		+145 (1)
Weight loss grams		0.06
<b>HEAT AGEING 70h @ 257°F (125°C) ASTM D573</b>		
Durometer change points shore A		+5.5
Elongation change %		-28.43
Tensile strength change PSI (MPa)		+50.7 (0.35)
Weight loss grams		0.07
<b>FLUID IMMERSION Oil No 3 70h @ 212°F (100°C) ASTM D471</b>		
Volume change %		+2.37
Durometer change points shore A		+1.5
Elongation change %		+1.3
Tensile strength change PSI (MPa)		+238 (1.64)

**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.