

# MC241 Nitrile 90 Shore Black

## ASTM D 2000 M2BG 912 B14EO34

Material Datasheet • Issue 2 • Dec 2017

### Material

Nitrile 90 Shore Black  
ASTM D 2000 M2BG 912 B14EO34

### 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)
- Mouldings (Custom/O Rings)
- VulcOrings



### Physical Properties

Original	Standard	Typical Values
Specific Gravity	ASTM D1817	1.31
Durometer shore A (slab)	ASTM D2240	86
Elongation % (Dumbbell)	ASTM D412	217
Tensile strength Psi (MPa) (Dumbbell)	ASTM D412	2119 (14.6)
Compression set % 22h @ 212°F (100°C) (slab)	ASTM D395B	17

### Heat Ageing 70h @ 212°F (100°C) ASTM D573

Durometer change points shore A	+3
Elongation change %	-18
Tensile strength change Psi (MPa)	+580 (4)
Weight loss grams	0.04

### Fluid Immersion Oil No 3 70h @ 212°F (100°C) ASTM D471

Volume change %	+4.96
Durometer change points shore A	0
Elongation change %	+3.18
Tensile strength change Psi (MPa)	+454 (3.13)

### 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.

