

# MC307 Genuine Viton® 'A' 70 Shore Black 'FDA/3-A/USP VI'

ASTM D 2000 M2HK 715 B37 FDA21 CFR1 77.2600  
USP25 CLASS VI Part 87/88

Material Datasheet • Issue 2 • Feb 2017

## Material

Genuine Viton® 'A' 70 Shore Black 'FDA/3-A/USP VI'  
ASTM D 2000 M2HK 715 B37  
FDA21 CFR177.2600  
USP25 CLASS VI Part 87/88

## Description

- Low compression set Viton 'A' O Ring grade.
- Copolymer with 66% fluorine content.
- Cure system is Bisphenol.

## Application

This material has excellent resistance to oils, fuels, lubricants, most mineral acids, aliphatic and aromatic hydrocarbons. Approved to USP Class VI and 3A Sanitary Class 1, is USP biological reactivity tested in vivo and extraction tested to 70°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 O Rings
- Extrusions (cords/profiles/tubes)
- VulcOrings



## Physical Properties

Original	Standard	Typical Values
Specific Gravity	ASTM D1817	2.17
Durometer shore A (slab)	ASTM D2240	72
Elongation % (Dumbbell)	ASTM D412	192
Tensile strength Psi (Mpa) (Dumbbell)	ASTM D412	2292 (15.8)
Compression set % 22h @ 347°F (175°C) (slab)	ASTM D395B	5.3
Low temperature TR-10 °F (°C) *	ASTM D1329	10.4 (-12)

\* nominal value based on a typical 70 shore vulcanisation

### 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 D 471

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. Viton® is a trademark of DuPont Performance Elastomers. Northern Engineering are Genuine Viton licensees.

