

MC187 Epdm 75 Shore Black "FDA"

ASTM D 2000 M2CA 710 A25

Material Datasheet • Issue 5 • Aug 2017

Material

Epdm 75 Shore Black "FDA"
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Description

- Epdm is a polymer of ethylene, propylene and a small amount of diene
- Cure system is peroxide
- Is FDA Compliant to CFR 21 177-2600 & European regulations EC1935/2004
- Is 3-A 18-03 Compliant Class 1 (except for milk fat test)

Application

Epdm's have a good resistance to ozone, ageing and weathering. They are suitable for HFC & HFD flame retardant hydraulic acids and brake fluids and have an exceptional resistance to hot water, steam and acids.

Temperature

- Low temperature service limit -40°F (-40°C)
- Upper temperature continuous service limit +284°F (+140°C)

Products

- Encapsulated O Rings
- Extrusions (cords/profiles/tubes)
- Mouldings (custom/O rings)
- VulcOrings & Vulcanised Profiles



Physical Properties

| Original | Standard | Typical Values |
|--|------------|----------------|
| Specific Gravity | ASTM D1817 | 1.12 |
| Durometer shore A (plug) | ASTM D2240 | 73 |
| Elongation % (Dumbbell) | ASTM D412 | 230 |
| Tensile strength Psi (MPa) (Dumbbell) | ASTM D412 | 1712 (11.8) |
| Compression set % 22h @ 212°F (100°C) (slab) | ASTM D395B | 9.8 |

Heat Ageing 70h @ 257°F (125°C) ASTM D573

| | |
|-----------------------------------|------------|
| Durometer change points shore A | +3 |
| Elongation change % | -2.2 |
| Tensile strength change Psi (MPa) | +29 (+0.2) |
| Weight loss grams | 0.07 |

Fluid Immersion Oil No 3 70h @ 302°F (150°C) ASTM D471

| | |
|-----------------------------------|-------------|
| Volume change % | +114 |
| Durometer change points shore A | -36 |
| Elongation change % | -49 |
| Tensile strength change Psi (MPa) | -899 (-6.2) |

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.

