NES Material Data Sheet MC308 Silicone 70 Shore FDA/USP Translucent

Jan-2024 Revision: 7

MATERIAL Silicone 70 Shore FDA/USP Class VI Translucent

ASTM D 2000 M2GE 707 A19B37E036

DESCRIPTION Translucent Silicone rubber

Cure system is peroxide

FDA compliant to CFR 21 177-2600 & European regulations EC1935/2004

ADI free

Meets EN10/2021

APPLICATION This material has excellent thermal resistance to both high and low temperatures

and is good with oxygen and ozone attack. Approved to USP Class VI, is USP biological reactivity tested in vivo and extraction tested at 121°C and is FDA compliant to

CFR 21 177-2600 & European regulations EC1935/2004.

TEMPERATURE Low temperature service limit -76°F (-60°C)

Upper temperature continuous service limit +428°F (+220°C)

PRODUCTS Encapsulated Seals

Extrusions (cords/profiles/tubes) Hot Vulcanised O rings & Profiles

PHYSICAL PROPERTIES

| ORIGINAL | STANDARD | TYPICAL VALUES |
|----------------------------------------------|------------|----------------|
| Specific Gravity | ASTM D1817 | 1.19 |
| Durometer shore A (slab) | ASTM D2240 | 67 |
| Elongation % (Dumbbell) | ASTM D412 | 369 |
| Tensile strength Psi (Mpa) (Dumbbell) | ASTM D412 | 1436 (9.9) |
| Compression set % 22h @ 347°F (175°C) (slab) | ASTM D395B | 17.8 |

HEAT AGEING 70h @ 437°F (225°C) ASTM D573

| Durometer change points shore A | +1 |
|-----------------------------------|-------------|
| Elongation change % | -94 |
| Tensile strength change Psi (Mpa) | -580 (-4.0) |
| Weight loss % | 2.2 |

FLUID IMMERSION Oil No 3 70h @ 302°F (150°C) ASTM D471

| Volume change % | +37.5 |
|-----------------------------------|-------------|
| Durometer change points shore A | -21 |
| Elongation change % | -109 |
| Tensile strength change Psi (Mpa) | -464 (-3.2) |

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.



Tel: +44 (0) 1909 560 203 Fax: +44 (0) 1909 560 184 Email: sales@nes-ips.com Web: www.nes-ips.com