# NES Material Data Sheet MC313 Silicone 70 Shore FDA/USP Translucent

Nov-2023 Revision: 5

MATERIAL Silicone 70 Shore FDA/USP Class VI Translucent

ASTM D 2000 M2GE 707 A19B37E036

**DESCRIPTION** Translucent Silicone rubber

Cure system is peroxide

ADI free

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

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

is good with oxygen and ozone attack and has very high permeability resistance.

Approved to USP Class VI, is USP biological reactivity tested in vivo and is extraction

tested at 121°C.

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

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

**PRODUCTS** Moulding (custom/O rings)

## PHYSICAL PROPERTIES

ORIGINAL	STANDARD	TYPICAL VALUES
Specific Gravity	ASTM D1817	1.18
Durometer shore A (slab)	ASTM D2240	65
Elongation % (Dumbbell)	ASTM D412	421
Tensile strength Psi (Mpa) (Dumbbell)	ASTM D412	1407 (9.7)
Compression set % 22h @ 347°F (175°C) (slab)	ASTM D395B	13.3

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

Durometer change points shore A	+1
Elongation change %	-204
Tensile strength change Psi (Mpa)	-623 (-4.3)
Weight loss %	2.0

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

Volume change %	+38.3
Durometer change points shore A	-23
Elongation change %	-207
Tensile strength change Psi (Mpa)	-623 (-4.3)

### 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.

