NES Material Data Sheet

MC312 Nitrile 65 Shore Metal/X-Ray Detectable FDA Blue

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MATERIAL Nitrile 65 Shore Metal/X-Ray Detectable FDA Blue ASTM D 2000 M2BG 610 B14 E034 DESCRIPTION NBR Acrylonitrile-Butadiene-Rubber ACN content is 33% Cure system is sulphur FDA compliant to CFR 21 177-2600 & European regulations EC1935/2004 **APPLICATION** This material has an excellent resistance aliphatic, hydrocarbons (e.g. propane, butane and petroleum), mineral oils/greases, vegetable/animal oils/greases, heating oil and diesel fuel. This compoind can be detected by metal detectors and X-Ray detectors. **TEMPERATURE** Low temperature service limit -22°F (-30°C) Upper temperature continuous service limit +248°F (+120°C) PRODUCTS Extrusions (cords/profiles/tubes) Hot Vulcanised O rings & Profiles Moulding (custom/O rings) PHYSICAL PROPERTIES ORIGINAL **STANDARD TYPICAL VALUES** Specific Gravity **ASTM D1817** 1.48 Durometer shore A (slab) **ASTM D2240** 61 Elongation % (Dumbbell) 664 ASTM D412 Tensile strength Psi (Mpa) (Dumbbell) ASTM D412 1218 (8.4) Compression set % 22h @ 158°F (70°C) (slab) 39.3 ASTM D395B HEAT AGEING 70h @ 212°F (100°C) ASTM D573 Durometer change points shore A +5 Elongation change % -179 Tensile strength change Psi (Mpa) -290 (-2.0) Weight loss % 1.6 FLUID IMMERSION Oil No 3 70h @ 212°F (100°C) ASTM D471 Volume change % +11.9Durometer change points shore A -11 Elongation change % -130 Tensile strength change Psi (Mpa) -232 (-1.6)

Sample tests were carried out on a Mettler Toledo Advanchek 300 machine, tests were carried out on a standard head 350mm wide x 175mm high, frequency at both 100 Khz and 300Khz, samples down to 2mm were detected.

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.



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