

Material Datasheet

Compound #: C70-B101

Neoprene, UL157, Black

Material Summary

| | |
|---|--|
| Material Type: | Neoprene |
| Durometer: | 70 |
| Color: | Black |
| Special Properties: | UL157 Listed |
| Recommended Temperature Range (Static): | -40°C (-40°F) to 100°C (212°F) |
| Cure System: | Metal-oxide |
| Meets Specification: | ASTM D2000 M3BC707 A14 B14 EO14 EO34 F17 |

| Original Properties | Requirements | Typical Results |
|---|--------------|-----------------|
| Hardness, (Shore A) (ASTM D2240-15) | 70±5 | 68 |
| Tensile Strength, psi(MPa) (ASTM D412-16) | 1015(7)(min) | 1940(13.38) |
| Elongation, (%) (ASTM D412-16) | 200(min) | 232 |
| Modulus at 100%, psi(MPa) (ASTM D412-16) | | 736(5.08) |
| Density, (Mg/m ³) (CNS5341-96, MethodA) | | 1.46 |

| (A14) Heat age, 70 Hrs @ 100 °C (ASTM D573-04) | Requirements | Typical Results |
|--|--------------|-----------------|
| Hardness Change, pts. | +15(max) | 3 |
| Tensile Strength Change, % | -15(max) | -4 |
| Elongation Change, % | -40(max) | -7 |
| Weight Change, % | | -1.3 |

| (B14) Compression set, 22 Hrs @ 100 °C (ASTM D395-18, Method B) | Requirements | Typical Results |
|---|------------------|-----------------|
| - | 35%(button)(max) | 10.5 |

| (EO14) IRM 901 Oil, 70 Hrs @ 100 °C (ASTM D471-16a) | Requirements | Typical Results |
|---|--------------|-----------------|
| Hardness Change, pts. | ±10 | 3 |
| Tensile Strength Change, % | -30(max) | 1 |
| Elongation Change, % | -30(max) | -5 |
| Volume Change, % | -10~+15 | -4.2 |

| (EO34) IRM 903 Oil, 70 Hrs @ 100 °C (ASTM D471-16a) | Requirements | Typical Results |
|---|--------------|-----------------|
| Hardness Change, pts. | | -18 |
| Tensile Strength Change, % | -60(max) | -17 |
| Elongation Change, % | -50(max) | -14 |
| Volume Change, % | +100(max) | 36.7 |

| (F17) Low-Temp Brittleness Point Test, 3 minute @ -40 °C (ASTM D2137-11, N) | Requirements | Typical Results |
|---|--------------|-----------------|
| Sample type: T-50, Coolant : Isopropyl alcohol | | |
| Brittleness temperature to nearest 1°C, | no-cracks | pass |

Compound Previously Known As: C70129

Report Date: 12/9/2019

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