



Zytel®

nylon resin

Zytel® 101L NC010

Nylon Resin

Zytel® 101L NC010 is a lubricated molding grade PA 66 resin.

| Property | Test Method | Units | Value | |
|-----------------------------|-------------|----------------|------------|------------|
| | | | DAM | 50%RH |
| Mechanical | | | | |
| Tensile Strength | ASTM D 638 | MPa (kpsi) | 83 (12.0) | 77 (11.2) |
| Tensile Strength at Yield | ASTM D 638 | MPa (kpsi) | 83 (12.0) | 58 (8.5) |
| Elongation at Yield | ASTM D 638 | % | 5 | 25 |
| Elongation at Break | ASTM D 638 | % | 60 | >300 |
| Poisson's Ratio | | | 0.41 | |
| Flexural Modulus | ASTM D 790 | MPa (kpsi) | 2830 (410) | 1210 (175) |
| Izod Impact | ASTM D 256 | J/m (ft lb/in) | 53 (1.0) | 112 (2.1) |
| Thermal | | | | |
| Heat Deflection Temperature | ASTM D 648 | °C (°F) | | |
| 0.45MPa (66psi) | | | 210 (410) | |
| 1.8MPa (264psi) | | | 65 (149) | |
| CLTE, Parallel | ASTM D 696 | E-4/C (E-4/F) | 0.7 (0.39) | |
| Melting Point | ASTM D 3418 | °C (°F) | 262 (504) | |
| Electrical | | | | |
| Volume Resistivity | ASTM D 257 | ohm cm | 1 E15 | 1 E13 |
| Dielectric Constant | ASTM D 150 | | | |
| 1E2 Hz | | | 4.0 | 8.0 |
| 1E3 Hz | | | 3.9 | 7.0 |
| 1E6 Hz | | | 3.6 | 4.6 |
| Dissipation Factor | ASTM D 150 | | | |
| 1E2 Hz | | 0.01 | 0.20 | |
| 1E3 Hz | | 0.02 | 0.20 | |
| 1E6 Hz | | 0.02 | 0.10 | |
| Flammability | | | | |
| Rating @ Thickness | UL94 | | V-2 | |
| Thickness Tested | UL94 | mm | 0.71 | |

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc.
Mechanical properties measured at 23°C (73°F) unless otherwise stated.

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Product Information

Zytel® 101L NC010

| Property | Test Method | Units | Value | |
|-------------------------------|-------------|---------|-------------------|-------|
| | | | DAM | 50%RH |
| Other | | | | |
| Specific Gravity | ASTM D 792 | | 1.14 | |
| Hardness, Rockwell | ASTM D 785 | | | |
| Scale M | | | 79 | 59 |
| Scale R | | | 121 | 108 |
| Taber Abrasion | ASTM D 1044 | mg | | |
| CS-17 Wheel, 1kg, 1000 cycles | | | | 7 |
| Water Absorption | ASTM D 570 | % | | |
| Immersion 24h | | | 1.2 | |
| Saturation | | | 8.5 | |
| Mold Shrinkage | | % | | |
| Flow, 3.2mm (0.126in) | | | 1.5 | |
| Processing | | | | |
| Melt Temperature Range | | °C (°F) | 280-305 (535-580) | |
| Mold Temperature Range | | °C (°F) | 40-95 (100-200) | |
| Processing Moisture Content | | % | <0.2 | |

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