

# DuPont™ Zytel®

nylon resin

## Zytel® 159L NC010

Zytel® 159L NC010 is a high viscosity, lubricated polyamide 612 resin that is suitable for extrusion applications such as monofilament and tubing.

| Property                          | Test Method        | Units                                  | Value             |
|-----------------------------------|--------------------|----------------------------------------|-------------------|
|                                   |                    |                                        | DAM               |
| <b>Identification</b>             |                    |                                        |                   |
| Resin Identification              | ISO 1043           |                                        | PA612             |
| Part Marking Code                 | ISO 11469          |                                        | >PA612<           |
| <b>Mechanical</b>                 |                    |                                        |                   |
| Yield Stress                      | ISO 527            | MPa (kpsi)                             | 62 (9.0)          |
| Nominal Strain at Break           | ISO 527            | %                                      | 35                |
| Yield Strain                      | ISO 527            | %                                      | 4.5               |
| Tensile Modulus                   | ISO 527            | MPa (kpsi)                             | 2400 (350)        |
| Flexural Modulus                  | ISO 178            | MPa (kpsi)                             | 2150 (310)        |
| Notched Charpy Impact Strength    | ISO 179/1eA        | kJ/m <sup>2</sup>                      | 5                 |
| <b>Thermal</b>                    |                    |                                        |                   |
| Deflection Temperature<br>1.80MPa | ISO 75f            | °C (°F)                                | 62 (144)          |
| Melting Temperature<br>10°C/min   | ISO 11357-1/-3     | °C (°F)                                | 216 (421)         |
| <b>Other</b>                      |                    |                                        |                   |
| Density                           | ISO 1183           | kg/m <sup>3</sup> (g/cm <sup>3</sup> ) | 1060 (1.06)       |
| Water Absorption<br>Immersion 24h | ISO 62, Similar to | %                                      | 0.45              |
| <b>Processing</b>                 |                    |                                        |                   |
| Melt Temperature Range            |                    | °C (°F)                                | 230-290 (445-550) |
| Melt Temperature Optimum          |                    | °C (°F)                                | 250 (480)         |
| Mold Temperature Range            |                    | °C (°F)                                | 50-90 (120-190)   |
| Mold Temperature Optimum          |                    | °C (°F)                                | 70 (160)          |
| Drying Time, Dehumidified Dryer   |                    | h                                      | 2-4               |
| Drying Temperature                |                    | °C (°F)                                | 80 (175)          |
| Processing Moisture Content       |                    | %                                      | <0.05             |

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc.  
 ISO Mechanical properties measured at 4.0mm, ISO Electrical properties measured at 2.0mm, and all ASTM properties measured at 3.2mm.  
 Test temperatures are 23°C unless otherwise stated.

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040730/050927

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