

# DuPont™ Zytel®

nylon resin

PRELIMINARY DATA

## Zytel® 159 NC010

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

Property	Test Method	Units	Value
			DAM
<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 (348)
Flexural Modulus	ISO 178	MPa (kpsi)	2150 (312)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m <sup>2</sup>	5
<b>Thermal</b>			
Deflection Temperature 1.80MPa	ISO 75f	°C (°F)	62 (144)
Melting Temperature 10°C/min	ISO 11357-1/-3	°C (°F)	216 (420)
<b>Other</b>			
Density	ISO 1183	kg/m <sup>3</sup> (g/cm <sup>3</sup> )	1060 (1.06)
Water Absorption 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.

**The above data are preliminary and are subject to change as additional data are developed on subsequent lots.**

The DuPont Oval Logo, DuPont™, The miracles of science™ and Zytel® are trademarks or registered trademarks of DuPont Company. Copyright© 2005.

040730/050926

The information provided in this data sheet corresponds to our knowledge on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience becomes available. The data provided fall within the normal range of product properties and relate only to the specific material designated; these data may not be valid for such material used in combination with any other materials, additives or pigments or in any process, unless expressly indicated otherwise. The data provided should not be used to establish specification limits or used alone as the basis of design; they are not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of a specific material for your particular purposes. Since DuPont cannot anticipate all variations in actual end-use conditions DuPont makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent rights. DuPont advises you to seek independent counsel for a freedom to practice opinion on the intended application or end-use of our products. Caution: Do not use this product in medical applications involving permanent implantation in the human body. For other medical applications see "DuPont Medical Caution Statement", H-50102.