

Nylon 6/6

Zytel ST801 NC010 and 42A NC010

The strongest of all aliphatic nylons, nylon 6/6 offers good abrasion resistance when compared to nylon 6. The addition of glass fibre improves stiffness and enhances fatigue resistance. Better low temperature toughness translates into more robust performance in cold environments than Acetal, PBT or nylon 6.

Summary of Properties

Property	ASTM Test Method	Units	Zytel® ST801 NC010	Zytel® 42A NC010
Tensile Strength	D 638	Mpa	51.7	85.5
Elongation at Break	D 638	%	60	90
Flexural Modulus	D 790	Mpa	1689	2827
Flexural Strength	D 790	Mpa	68	-
Izod Impact	D 256	ft lb/in	17	notched 1.2
Heat Deflection Temperature .045 Mpa (66 psi) Annealed	D 648	°F (°C)	421 (216)	410 (210)
Melt Point	D 3418	°F (°C)	505 (263)	505 (263)
Volume Resistivity	D 257	ohm cm	1 E14	1 E15
Dielectric Constant 1E2 Hz	D 150	ohm cm	3.2	4
Dissipation Factor 1 E2 Hz	D 150	ohm cm	0.01	0.01
Flammability Rating at Minimum Thickness	UL 94		HB at .032"	HB at .005"
Specific Gravity	D 792		1.08	1.14
Water Absorption 24 Hour Immersion	D 570	%	1.2	1.2

NOTE: All data courtesy of DuPont, Inc. Properties are based on unpigmented, unfilled resin per relevant ASTM-D at 73° F unless otherwise stated.

MARKET APPLICATIONS:

- Environmental
- Fluid handling
- Medical devices
- Telecommunications
- Transportation systems



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