

**Product Texts**

Zytel® ST801A NC010A is an Unreinforced, Super Toughened, partially UV stabilized, Polyamide 66

<b>Processing/Physical Characteristics</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
<sup>[C]</sup> Molding shrinkage, parallel	<b>1.8 / *</b>	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	<b>1.4 / *</b>	%	ISO 294-4, 2577
<sup>[C]</sup> Ejection temperature	<b>190</b>	°C	-

[C]: CAMPUS

<b>Mechanical properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	<b>2000 / 900</b>	MPa	ISO 527
<sup>[C]</sup> Stress at 50% strain	<b>49 / 44</b>	MPa	ISO 527
<sup>[C]</sup> Strain at break	<b>&gt;50 / &gt;50</b>	%	ISO 527
<sup>[C]</sup> Tensile creep modulus, 1h	<b>* / 800</b>	MPa	ISO 899-1
<sup>[C]</sup> Tensile creep modulus, 1000h	<b>* / 700</b>	MPa	ISO 899-1
<sup>[C]</sup> Charpy impact strength, +23°C	<b>- / N</b>	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	<b>70 / 100</b>	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	<b>20 / 20</b>	kJ/m <sup>2</sup>	ISO 179/1eA

[C]: CAMPUS

<b>Thermal properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	<b>262 / *</b>	°C	ISO 11357-1/-3
<sup>[C]</sup> Glass transition temperature, 10°C/min	<b>75 / *</b>	°C	ISO 11357-1/-2
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	<b>63 / *</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	<b>157 / *</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Vicat softening temperature, B	<b>205 / *</b>	°C	ISO 306
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	<b>140 / *</b>	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	<b>130 / *</b>	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Burning Behav. at 1.5 mm nom. thickn.	<b>HB / *</b>	class	IEC 60695-11-10
Thickness tested	<b>1.5 / *</b>	mm	-
Yellow Card available	<b>yes / *</b>	-	-
<sup>[C]</sup> Burning Behav. at thickness h	<b>HB / *</b>	class	IEC 60695-11-10
Thickness tested	<b>0.8 / *</b>	mm	-
Yellow Card available	<b>yes / *</b>	-	-
<sup>[C]</sup> Oxygen index	<b>20 / *</b>	%	ISO 4589-1/-2

[C]: CAMPUS

<b>Electrical properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
<sup>[C]</sup> Relative permittivity, 100Hz	<b>3.5 / 5.9</b>	-	IEC 62631-2-1
<sup>[C]</sup> Relative permittivity, 1MHz	<b>3.3 / 3.5</b>	-	IEC 62631-2-1
<sup>[C]</sup> Dissipation factor, 100Hz	<b>50 / 1580</b>	E-4	IEC 62631-2-1
<sup>[C]</sup> Dissipation factor, 1MHz	<b>100 / 380</b>	E-4	IEC 62631-2-1
<sup>[C]</sup> Volume resistivity	<b>&gt;1E13 / 8.7E10</b>	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Surface resistivity	<b>* / 1E12</b>	Ohm	IEC 62631-3-2
<sup>[C]</sup> Electric strength	<b>25 / -</b>	kV/mm	IEC 60243-1
<sup>[C]</sup> Comparative tracking index	<b>600 / -</b>	-	IEC 60112

[C]: CAMPUS

<b>Other properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<sup>[C]</sup> Water absorption	<b>6.5 / *</b>	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	<b>2 / *</b>	%	Sim. to ISO 62
<sup>[C]</sup> Density	<b>1070 / -</b>	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

Material specific properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Viscosity number	130 / *	cm³/g	ISO 307, 1157, 1628

[C]: CAMPUS

**Characteristics**

**Processing**

Injection Molding, Film Extrusion, Profile Extrusion, Sheet Extrusion, Other Extrusion, Coating, Casting

**Special Characteristics**

High impact or impact modified, U.V. stabilized or stable to weather

**Delivery form**

Pellets

**Regional Availability**

North America, Europe, Asia Pacific, South and Central America

**Additives**

Lubricants, Release agent