

**NST45-01BK**

PA6

Next Polymers Ltd.

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ASTM Data</b>			
Mold Shrinkage, MD	0.0095	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.014	mm/mm	ASTM D 955
Mechanical properties	dry / cond	Unit	Test Standard
<b>ASTM Data</b>			
Tensile Modulus	850 / 400	MPa	ASTM D 638
Tensile Strength	45 / 32	MPa	ASTM D 638
Elongation at Break	50 / 200	%	ASTM D 638
Flexural Modulus	850 / 400	MPa	ASTM D 790
Flexural Strength	50 / 35	MPa	ASTM D 790
Rockwell Hardness	R 95 /	-	ASTM D 785
Izod Impact notched, 1/8 in	785 / N	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	137 / N	J/m	ASTM D 256
Temperature	-40	°C	-
Thermal properties	Value	Unit	Test Standard
<b>ASTM Data</b>			
UL 94 Flame rating	HB	-	UL 94
Thickness tested	0.8	mm	-
Coefficient of Thermal Expansion, MD	130	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	140	E-6/K	ASTM D 696
DTUL @ 66 psi	85	°C	ASTM D 648
DTUL @ 264 psi	45	°C	ASTM D 648
Melting Temperature	218	°C	ASTM D 3418
Electrical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
Volume resistivity	1E13 / -	Ohm*m	IEC 62631-3-1
Surface resistivity	* / 1E14	Ohm	IEC 62631-3-2
Electric strength	32 / -	kV/mm	IEC 60243-1
Comparative tracking index	600 / -	-	IEC 60112
Other properties	Value	Unit	Test Standard
Water Absorption, 24hr	2.4	%	ASTM D 570
Water Absorption, Equilibrium	7.8	%	ASTM D 570
Density	1050	kg/m <sup>3</sup>	ASTM D 792

**Characteristics****Processing**

Injection Molding

**Delivery form**

Black

**Special Characteristics**

Heat stabilized or stable to heat

**Applications**

Encapsulation, Sports Equipment

**Regional Availability**

Asia Pacific