

TOYOBO Nylon NB-5620S

Polyamide

TOYOBO America, Inc.

General

Manufacturer / Supplier	• TOYOBO America, Inc.
Generic Symbol	• Nylon, Unspecified
Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Mineral Filler, 15% Filler by Weight
Forms	• Pellets

Physical	Test Method	Unit	Dry	Conditioned
Specific Gravity	ASTM D792	g/cm ³	1.17	--
Melt Mass-Flow Rate (MFR)	ASTM D1238	g/10 min	8.0	--
Molding Shrinkage - Flow	ASTM D955			
1.00 mm		%	0.60 to 0.80	--
3.00 mm		%	1.4 to 1.8	--
Water Absorption	ASTM D570			
24 hr		%	0.50	--
Equilibrium, 65% RH		%	2.1	--

Mechanical	Test Method	Unit	Dry	Conditioned
Tensile Strength	ASTM D638			
Yield, -40°C		MPa	100	90.0
Yield, 23°C		MPa	60.0	52.0
Yield, 80°C		MPa	25.0	22.0
Tensile Elongation (Break, 23°C)	ASTM D638	%	8.0	--
Flexural Modulus	ASTM D790			
-40°C		MPa	6200	5400
23°C		MPa	3700	2300
80°C		MPa	2800	1400
Flexural Strength	ASTM D790			
Yield, -40°C		MPa	160	152
Yield, 23°C		MPa	95.0	79.0
Yield, 80°C		MPa	40.0	30.0

Impact	Test Method	Unit	Dry	Conditioned
Notched Izod Impact	ASTM D256			
-40°C		J/m	40.0	60.0
23°C		J/m	54.0	220

Hardness	Test Method	Unit	Dry	Conditioned
Rockwell Hardness (R-Scale)	ASTM D785		116	--

Thermal	Test Method	Unit	Dry	Conditioned
Deflection Temperature Under Load	ASTM D648			
0.45 MPa, Unannealed		°C	180	--
1.8 MPa, Unannealed		°C	102	--

Electrical	Test Method	Unit	Dry	Conditioned
Volume Resistivity	ASTM D257	ohm-cm	1.0E+15	1.0E+12
Dielectric Strength (2.00 mm)	ASTM D149	kV/mm	25	21
Arc Resistance	ASTM D495	sec	130	120
Comparative Tracking Index	IEC 60112	V	600	600

Flammability	Test Method	Unit	Dry	Conditioned
Flame Rating - UL	UL 94		HB	--

Additional Information

Dry	Comparative Tracking Index, IEC Method: >600 V
Conditioned	Comparative Tracking Index, IEC Method: >600 V



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Injection	Nominal Value	Unit
Processing (Melt) Temp	240 to 290	°C
Mold Temperature	50.0 to 120	°C
Injection Pressure	50.0	MPa

Notes

¹ Typical properties: these are not to be construed as specifications.

