



Stat-Tech™ ST6000-5006 FR BLACK X3

Polyamide 6

Key Characteristics

General	
Material Status	• Commercial: Active
Regional Availability	• Europe
RoHS Compliance	• Contact Manufacturer
Forms	• Pellets
Processing Method	• Injection Molding

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	1.40 g/cm ³	1.40 g/cm ³	ISO 1183
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus (73°F (23°C))	1.31E+6 psi	9000 MPa	ISO 527
Tensile Strength (Break, 73°F (23°C))	15200 psi	105 MPa	ISO 527
Tensile Elongation (Break, 73°F (23°C))	1.5 to 2.0 %	1.5 to 2.0 %	ISO 527
Flexural Modulus	1.02E+6 psi	7000 MPa	ISO 178
Flexural Stress	21800 psi	150 MPa	ISO 178
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength 73°F (23°C), Injection Molded	1.1 ft·lb/in ²	2.4 kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength 73°F (23°C), Injection Molded	9.5 ft·lb/in ²	20 kJ/m ²	ISO 179/1eU
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	1.0E+9 to 1.0E+10 ohms	1.0E+9 to 1.0E+10 ohms	IEC 60093
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating (0.63 in (16.0 mm))	V-1	V-1	UL 94

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	4.0 hr	4.0 hr
Processing (Melt) Temp	482 to 536 °F	250 to 280 °C
Mold Temperature	149 to 203 °F	65 to 95 °C

Notes

¹ Typical values are not to be construed as specifications.

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