



SLS® FR-106 Impact Resistant Polyamide

Features & Benefits

- Outstanding Impact Resistance
- Meets Federal Aviation Regulations (FAR) Fire Retardant Requirements
- Exceptional Mechanical Strength
- Withstands Aggressive Functional Testing
- Ideal For:
 - Living Hinges / Snap Fits
 - Impellers
 - Housings / Enclosures
 - Low to Mid Volume Rapid Manufacturing
 - Automotive Applications

Additional Information

- Available for Instant Online Quoting
- Maximum Build: 15x13x18in
- Tolerances: +/- .003" for the first 3 inches, +/- .001" for each additional inch
- Minimum Wall Thickness: .035"
- Finish Options Include:
 - Natural
 - Available in White
 - Color Dye

Material Properties

	TEST	FR-106
Density, Bulk	ASTM D1895	0.55 g/cc
Particle Size	d90	Laser Diffraction 151 µm
	d50	Laser Diffraction 95 µm
	d10	Laser Diffraction 45 µm
Specific Gravity	ASTM D792	1.07 g/cc

Thermal Properties

	TEST	FR-106
Melting Point	ASTM D3418	186°C
Melt Flow Rate (180 sec., 1.0 kg, 235°C)	ASTM D1238	9 ± 3 g/10 min

Typical Part Properties

	TEST	FR-106
Tensile Strength, Ultimate (XY)	XY Orientation	ASTM D638 46 MPa / 6700 psi
	Z Orientation	ASTM D638 39 MPa / 5600 psi
Tensile Strength, Yield	XY Orientation	ASTM D638 26 MPa / 3700 psi
	Z Orientation	ASTM D638 21 MPa / 3100 psi
Modulus of Elasticity	ASTM D638	1,345 MPa / 195 ksi
Elongation at Break	XY Orientation	ASTM D638 38%
	Z Orientation	ASTM D638 21%
Flammability	12 Second Burn	FAR 25.853 Pass
	60 Second Burn	FAR 25.853 Pass
Smoke Density	FAR 25.853	Pass