CELSTRAN® PA66-SF50-02 AF3005

CELSTRAN® Long Fibre

The Celstran PA66-SF50-02 AF3001 Natural is a 50% by weight stainless steel fiber concentrate. This product is intended to be used at levels from 6% to 40% in combination with neat or filled PA66 to achieve the desired level of electrostatic dissipation (ESD) and electromagnetic interference (EMI)/ radio frequency interference (RFI) shielding. The resulting formulation will yield stainless steel levels of 3% to 20%.

'Long Stainless Fiber' materials have a significant advantage over short stainless fiber filled plastics. Conductivity properties increase by nearly 100 times when comparing to similar loadings.

Product information

Resin Identification	PA66-LMEF(x)50	ISO 1043
Part Marking Code	>PA66-LMEF(x)50<	ISO 11469

Thermal properties

Melting temperature, 10 °C/min	500	°F	ISO 11357-1/-3

Physical/Other properties

Density	0.0718	lb/in³	ISO 1183

Injection

Drying Recommended	yes	
Drying Temperature	176	°F
Drying Time, Dehumidified Dryer	2 - 4	h
Processing Moisture Content	≤0.2	%
Melt Temperature Optimum	572	°F
Min. melt temperature	545	°F
Max. melt temperature	599	°F
Max. screw tangential speed	≤0.15	m/s
Mold Temperature Optimum	212	°F
Min. mold temperature	158	°F
Max. mold temperature	248	°F
Hold pressure range	7250 - 14500	psi
Hold Pressure Time (h is the max. wall thickness of the part in mm)	h^2+2	s

Characteristics

Processing	Injection Molding
Special characteristics	Increased electrical conductivity, Anti-static, Static dissipative, Heat stabilized or stable to heat

Revised: 2025-07-10 Source: Celanese Materials Database

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