

CELSTRAN® PCABS-SF6-05 AF3005 NATURAL

Long Stainless Steel Fiber Filled Polycarbonate/ABS Material
 (6 wt% stainless steel fiber fiber)

Celstran® PCABS-SF6-05 AF3005 NATURAL is composed of a polycarbonate/ABS polymer matrix with 6 wt% stainless steel fiber. Celstran® long stainless steel fiber filled PC/ABS materials provide electrical conductivity needed to reach desired levels of electrostatic dissipation (ESD) and electromagnetic interference (EMI)/radio frequency interference (RFI) shielding. These materials have significant advantages over short stainless steel fiber filled plastics. Conductivity properties increase by nearly 100 times when comparing to similar loadings. Celstran®PCABS-SF-05 materials contain continuous stainless steel filaments wetted and encapsulated by PC/ABS resin. Various stainless steel loadings can be selected to meet specific end use requirements.

Typical mechanical properties

Tensile Modulus	2800 MPa	ISO 527-1/-2
Stress at break, 5mm/min	60 MPa	ISO 527-1/-2
Strain at break, 5mm/min	3.8 %	ISO 527-1/-2
Flexural Modulus	2800 MPa	ISO 178
Flexural Strength	60 MPa	ISO 178
Izod notched impact strength, 23 °C	70 kJ/m ²	ISO 180/1A

Thermal properties

Temp. of deflection under load, 1.8 MPa	110 °C	ISO 75-1/-2
---	--------	-------------

Flammability

Burning Behav. at 1.5mm nom. thickn.	HB class	UL 94
Thickness tested	1.5 mm	UL 94
UL recognition	yes	UL 94

Electrical properties

Electrical shielding, 1 GHz, 1.5mm	90 dB	ASTM D 4935
------------------------------------	-------	-------------

Other properties

Density	1200 kg/m ³	ISO 1183
---------	------------------------	----------
