

Technical Data Sheet

POLYFLAM® PC/PBT 333 5V

Polycarbonate + PBT
Engineering Plastics



Product Description

POLYFLAM® PC/PBT 333 5V Polycarbonate/Polybutylene Terephthalate (PC/PBT) resin is a 5VA and V-0 brominated flame retardant material. This general purpose resin is impact modified, UV stabilized, and a injection moldable grade. POLYFLAM® PC/PBT 333 5V is an excellent candidate for variety of applications including electrical enclosures, switches, connectors and bobbins.

General

Features • Flame Retardant

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.30	1.30 g/cm³	ASTM D792
Melt Volume-Flow Rate (MVR) (250°C/5.0 kg)	8.00 cm³/10min	8.00 cm³/10min	ISO 1133
Molding Shrinkage			ASTM D955
Flow : 24 hr, Injection Molded	7.4E-3 in/in	0.74 %	
Flow : 48 hr, Injection Molded	7.8E-3 in/in	0.78 %	
Across Flow : 24 hr, Injection Molded	7.7E-3 in/in	0.77 %	
Across Flow : 48 hr, Injection Molded	8.2E-3 in/in	0.82 %	
Water Absorption (Equilibrium)	0.17 %	0.17 %	ASTM D570
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus ¹	257000 psi	1770 MPa	ASTM D638
Tensile Strength ²			ASTM D638
Yield	6890 psi	47.5 MPa	
Break	6140 psi	42.3 MPa	
Tensile Strain ²			ASTM D638
Yield	4.4 %	4.4 %	
Break	70 %	70 %	
Flexural Modulus ³			ASTM D790
Chord	275000 psi	1890 MPa	
Tangent	273000 psi	1880 MPa	
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact	12 ft·lb/in	640 J/m	ASTM D256
Unnotched Izod Impact	45 ft·lb/in	2400 J/m	ASTM D256
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	243 °F	117 °C	
264 psi (1.8 MPa), Unannealed	217 °F	103 °C	
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating			UL 94
0.024 in (0.60 mm)	V-0	V-0	
0.12 in (3.0 mm)	5VA	5VA	
Oxygen Index	36 %	36 %	ASTM D2863

Notes

¹ 0.039 in/min (1.0 mm/min)

² 2.0 in/min (50 mm/min)

³ 0.051 in/min (1.3 mm/min)

Notes

These are typical property values not to be construed as specification limits.