

CELANYL® XT6 GF35 BK 9005/A - PPA

Description

PPA, 35% glass fiber reinforced, easy processing

XT6 compounds are designed for engineering applications requiring a maximum service temperature higher than that of standard polyamides. The most relevant characteristics are the following: High stiffness and strength at elevated temperatures, excellent creep behavior, small influence on mechanical properties after moisture uptake, good dimensional stability and low warpage.

Physical properties	Value	Unit	Test Standard
Density	90.5	lb/ft ³	ISO 1183
Molding shrinkage, parallel (flow)	0.2 - 0.5	%	ISO 294-4, 2577
Molding shrinkage, transverse normal	0.5 - 0.7	%	ISO 294-4, 2577
Humidity absorption, 23°C/50%RH	1.2	%	ISO 62
Mechanical properties	Value	Unit	Test Standard
Tensile modulus	1.77E6/-	psi	ISO 527-1, -2
Tensile stress at break, 5mm/min	29000/-	psi	ISO 527-1, -2
Tensile strain at break, 5mm/min	2/-	%	ISO 527-1, -2
Flexural modulus, 23°C	1.67E6/-	psi	ISO 178
Charpy impact strength, 23°C	24.7/-	ft-lb/in ²	ISO 179/1eU
Charpy notched impact strength, 23°C	4.76/-	ft-lb/in ²	ISO 179/1eA
Charpy notched impact strength, -30°C	4.52/-	ft-lb/in ²	ISO 179/1eA
Thermal properties	Value	Unit	Test Standard
Melting temperature, 20°C/min	590	°F	ISO 11357-1/-3
DTUL at 1.8 MPa	500	°F	ISO 75-1, -2
Flammability @3.2mm nom. thickn.	HB	class	UL 94
Flammability @1.6mm nom. thickn.	HB	class	UL 94
Flammability @0.8mm nom. thickn.	HB	class	UL 94
Flammability @0.4mm nom. thickn.	HB	class	UL 94
Electrical properties	Value	Unit	Test Standard
Volume resistivity, 23°C	1E13/-	Ohm*m	IEC 62631-3-1
Electric strength, 23°C (AC)	533/-	kV/in	IEC 60243-1
CTI 50 drops	550	V	IEC 60112



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Characteristics

Special Characteristics	Heat resistant, Improved creep, Low warpage
Product Categories	Glass reinforced

