CELANYL® XT1 GF50 BK 9005/W/FA

PPA-GF50 Celanese

Product Texts

Intended for engineering applications that require a maximum service temperature higher than that of normal aliphatic polyamides. In addition to the outstanding thermal and chemical resistance, it provides high and constant mechanical performance, unaltered even after moisture absorption. Excellent creep behavior and dimensional stability. Suitable for drinking water applications.

Flammability @3.2mm nom. thickn.	HB	-
Flammability @0.8mm nom. thickn.	HB	-

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
[C] Molding shrinkage, parallel	**0.2 / ***	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**0.4 / ***	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**18500 / 18500**	MPa	ISO 527
[C] Stress at break	**260 / 250**	MPa	ISO 527
[C] Strain at break	**1.95 / 2**	%	ISO 527
[C] Charpy impact strength, +23°C	**80 / 110**	kJ/m²	ISO 179/1eU
[C] Charpy impact strength, -30°C	**80 / 90**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**9.5 / 12.5**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**8.5 / 15**	kJ/m²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Temp. of deflection under load, 1.80 MPa	**280 / ***	°C	ISO 75-1/-2
Thickness tested	**1.6 / ***	mm	-

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Volume resistivity	**1E13 / -**	Ohm*m	IEC 62631-3-1
[C] Electric strength	**22 / -**	kV/mm	IEC 60243-1

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Water absorption	**2.9 / ***	%	Sim. to ISO 62
[C] Humidity absorption	**1 / ***	%	Sim. to ISO 62
[C] Density	**- / 1640**	kg/m³	ISO 1183

[C]: CAMPUS

Characteristics

Delivery form
Black

Chemical Resistance
General Chemical Resistance

Special Characteristics
Heat stabilized or stable to heat

Certifications
Drinking water contact

Features
Creep Resistance

Regional Availability
North America, Europe, Asia Pacific