

CELANYL® XT1 HH GF35 NC 1102/C - PPA

Description

PPA compound, 35% glass fiber reinforced, heat stabilized.

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. Extended heat ageing resistance.

Preliminary Data Sheet

Physical properties	Value	Unit	Test Standard
Density	92.4	lb/ft ³	ISO 1183
Molding shrinkage, parallel (flow)	0.2 - 0.4	%	ISO 294-4, 2577
Molding shrinkage, transverse normal	0.4 - 0.7	%	ISO 294-4, 2577
Humidity absorption, 23°C/50%RH	1.3	%	ISO 62
Mechanical properties	Value	Unit	Test Standard
Tensile modulus	1.89E6/1.89E6	psi	ISO 527-1, -2
Tensile stress at break, 5mm/min	30500/-	psi	ISO 527-1, -2
Tensile strain at break, 5mm/min	2/-	%	ISO 527-1, -2
Flexural modulus, 23°C	1.74E6/-	psi	ISO 178
Charpy impact strength, 23°C	28.5/-	ft-lb/in ²	ISO 179/1eU
Charpy impact strength, -30°C	26.2/-	ft-lb/in ²	ISO 179/1eU
Charpy notched impact strength, 23°C	3.81/-	ft-lb/in ²	ISO 179/1eA
Charpy notched impact strength, -30°C	3.09/-	ft-lb/in ²	ISO 179/1eA
Izod impact notched, 23°C	4.04/-	ft-lb/in ²	ISO 180/1A
Thermal properties	Value	Unit	Test Standard
Melting temperature, 20°C/min	612	°F	ISO 11357-1/-3
DTUL at 1.8 MPa	518	°F	ISO 75-1, -2
Flammability @1.6mm nom. thickn.	HB	class	UL 94
Electrical properties	Value	Unit	Test Standard
CTI 50 drops	550	V	IEC 60112



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Characteristics

Special Characteristics	Chemical resistant, Heat resistant, Improved creep
Product Categories	Glass reinforced
Processing	Injection molding
Delivery Form	Granules

