

Celanyl® B3 GF50 NC 1102

Polyamide 6

Celanese Corporation

PROSPECTOR®

www.ulprospector.com

Technical Data

Product Description

PA6, 50% glass fibre reinforced
Car industry, Household appliances, Electrical devices.

General

Material Status	• Commercial: Active
Search for UL Yellow Card	• Celanese Corporation • Celanyl®
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Filler / Reinforcement	• Glass Fiber
Multi-Point Data	• Isothermal Stress vs. Strain (ISO 11403-1) • Secant Modulus vs. Strain (ISO 11403-1)

Physical	Nominal Value Unit	Test Method
Density	1.54 g/cm ³	ISO 1183
Molding Shrinkage		ISO 294-4
Across Flow	0.50 to 0.80 %	
Flow	0.10 to 0.40 %	
Water Absorption		ISO 62
Saturation, 23°C	4.7 %	
Equilibrium, 23°C, 50% RH	1.1 %	
Viscosity Number (H2SO4 (Sulphuric Acid))	140 cm ³ /g	ISO 307

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	16500 MPa	ISO 527-1/1A
Tensile Stress (Break)	235 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	2.5 %	ISO 527-2/1A/5

Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength (23°C)	19 kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength (23°C)	No Break	ISO 179/1eU

Hardness	Nominal Value Unit	Test Method
Ball Indentation Hardness ²	270 MPa	ISO 2039-1

Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		
0.45 MPa, Unannealed	220 °C	ISO 75-2/B
1.8 MPa, Unannealed	215 °C	ISO 75-2/A
Melting Temperature ³	225 °C	ISO 11357-3

Electrical	Nominal Value Unit	Test Method
Surface Resistivity	1.0E+13 ohms	IEC 60093
Volume Resistivity	1.0E+15 ohms·cm	IEC 60093
Electric Strength	23 kV/mm	IEC 60243-1
Comparative Tracking Index ⁴	550 V	IEC 60112

Flammability	Nominal Value Unit	Test Method
Flame Rating		UL 94
0.8 mm	HB	
3.2 mm	HB	
Glow Wire Flammability Index		IEC 60695-2-12
0.8 mm	650 °C	
3.2 mm	650 °C	



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Notes

¹ Typical properties: these are not to be construed as specifications.

² 30s

³ 20°C/min

⁴ 50 drops



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Where to Buy

Supplier

Celanese Corporation

Florence, Florence USA

Telephone: 800-833-4882

Web: <http://www.celanese.com/engineered-materials>

Distributor

Amco Polymers

Telephone: 800-262-6685

Web: <http://www.amcopolymers.com/>

Availability: North America

RESINEX Group

RESINEX is a Pan European distribution company. Contact RESINEX for availability of individual products by country.

Telephone: +32-14-672511

Web: <http://www.resinex.com/>

Availability: Europe

SNETOR Distribution

SNETOR Distribution is a Pan European distribution company. Contact SNETOR for availability of individual products by country.

Telephone: +33-1-4904-8888

Web: <http://www.snetor.com/>

Availability: Bulgaria, Croatia, Czech Republic, France, Hungary, Poland, Romania, Serbia, Slovakia, Slovenia

