

# Celanyl® B3 GF30 NC 1102/S

Polyamide 6

Celanese Corporation

PROSPECTOR®

www.ulprospector.com

## Technical Data

### Product Description

Polyamide 6 compound, 30% glass fiber reinforced, UL listed HB@0.75mm.  
General purpose grade, suitable for any technical application.

### General

|                             |  |
|-----------------------------|--|
| Material Status             | • Commercial: Active   |
| UL Yellow Card <sup>1</sup> | • E331274-102483073<br>• E86034-102512463  |
| Search for UL Yellow Card   | • Celanese Corporation<br>• Celanyl®   |
| Availability                | • Africa & Middle East<br>• Asia Pacific<br>• Europe<br>• Latin America<br>• North America |
| Filler / Reinforcement      | • Glass Fiber  |
| Uses                        | • Automotive Applications  |
| Forms                       | • Granules   |
| Processing Method           | • Injection Molding  |

| Physical                                  | Nominal Value Unit     | Test Method |
|---|------------------------|-------------|
| Density                                   | 1.35 g/cm <sup>3</sup> | ISO 1183    |
| Molding Shrinkage                         |                        | ISO 294-4   |
| Across Flow                               | 0.60 to 1.0 %          |             |
| Flow                                      | 0.20 to 0.60 %         |             |
| Water Absorption                          |                        | ISO 62      |
| Saturation, 23°C                          | 6.3 %                  |             |
| Equilibrium, 23°C, 50% RH                 | 1.8 %                  |             |
| Viscosity Number (H2SO4 (Sulphuric Acid)) | 140 cm <sup>3</sup> /g | ISO 307     |

| Mechanical             | Nominal Value Unit | Test Method    |
|------------------------|--------------------|----------------|
| Tensile Modulus        | 9500 MPa           | ISO 527-1/1A   |
| Tensile Stress (Break) | 180 MPa            | ISO 527-2/1A/5 |
| Tensile Strain (Break) | 3.5 %              | ISO 527-2/1A/5 |

| Impact                                  | Nominal Value Unit     | Test Method |
|---|------------------------|-------------|
| Charpy Notched Impact Strength          |                        | ISO 179/1eA |
| -30°C                                   | 9.0 kJ/m <sup>2</sup>  |             |
| 23°C                                    | 13 kJ/m <sup>2</sup>   |             |
| Charpy Unnotched Impact Strength (23°C) | > 60 kJ/m <sup>2</sup> | ISO 179/1eU |
| Notched Izod Impact Strength (23°C)     | 14 kJ/m <sup>2</sup>   | ISO 180/1A  |

| Hardness                               | Nominal Value Unit | Test Method |
|--|--------------------|-------------|
| Ball Indentation Hardness <sup>3</sup> | 180 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               | 210 °C             | ISO 75-2/A  |
| Melting Temperature <sup>4</sup>  | 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   |
| Comparative Tracking Index (CTI) | PLC 1              | UL 746A     |
| Comparative Tracking Index       |                    | IEC 60112   |
| -- 5                             | 550 V              |             |
| -- 6                             | 525 V              |             |
| Comparative Tracking Index       | Group II           | IEC 60112   |



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| Flammability          | Nominal Value Unit | Test Method |
|-----------------------|--------------------|-------------|
| Flame Rating (0.8 mm) | HB                 | UL 94       |

## Notes

<sup>1</sup> A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

<sup>2</sup> Typical properties: these are not to be construed as specifications.

<sup>3</sup> 30s

<sup>4</sup> 20°C/min

<sup>5</sup> 50 drops

<sup>6</sup> 100 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

##### 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

