

Technical Data

Product Description

PA66, 50% glass fibre reinforced
Car industry, Household appliances, Electrical devices.

General

| | |
|-----------------------------|--|
| Material Status | • Commercial: Active |
| UL Yellow Card ¹ | • E86034-102512455 |
| Search for UL Yellow Card | • Celanese Corporation • Celanyl® |
| Availability | • Africa & Middle East • Asia Pacific • Europe • Latin America • North America |
| Filler / Reinforcement | • Glass Fiber |

| Physical | Nominal Value Unit | Test Method |
|---------------------------|------------------------|-------------|
| Density | 1.57 g/cm ³ | ISO 1183 |
| Molding Shrinkage | | ISO 294-4 |
| Across Flow | 0.50 to 0.60 % | |
| Flow | 0.30 % | |
| Water Absorption | | ISO 62 |
| Saturation, 23°C | 4.0 % | |
| Equilibrium, 23°C, 50% RH | 0.90 % | |

| Mechanical | Nominal Value Unit | Test Method |
|-------------------------|--------------------|----------------|
| Tensile Modulus | 17000 MPa | ISO 527-1/1A |
| Tensile Stress (Break) | 230 MPa | ISO 527-2/1A/5 |
| Tensile Strain (Break) | 2.2 % | ISO 527-2/1A/5 |
| Flexural Modulus (23°C) | 15000 MPa | ISO 178 |

| Impact | Nominal Value Unit | Test Method |
|----------------------------------|----------------------|-------------|
| Charpy Notched Impact Strength | | ISO 179/1eA |
| -30°C | 14 kJ/m ² | |
| 23°C | 17 kJ/m ² | |
| Charpy Unnotched Impact Strength | | ISO 179/1eU |
| -30°C | 58 kJ/m ² | |
| 23°C | 70 kJ/m ² | |
| Notched Izod Impact Strength | | ISO 180/1A |
| -30°C | 13 kJ/m ² | |
| 23°C | 16 kJ/m ² | |

| Thermal | Nominal Value Unit | Test Method |
|-----------------------------------|--------------------|-------------|
| Deflection Temperature Under Load | | |
| 0.45 MPa, Unannealed | 262 °C | ISO 75-2/B |
| 1.8 MPa, Unannealed | 257 °C | ISO 75-2/A |

| Electrical | Nominal Value Unit | Test Method |
|---|--------------------|-------------|
| Surface Resistivity | 1.0E+12 ohms | IEC 60093 |
| Volume Resistivity | 1.0E+15 ohms·cm | IEC 60093 |
| Electric Strength | 22 kV/mm | IEC 60243-1 |
| Comparative Tracking Index ³ | 500 V | IEC 60112 |



Celanyl® A3 GF50 NC 1102/Z

Polyamide 66

Celanese Corporation

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| Flammability | Nominal Value Unit | Test Method |
|-------------------------------------|--------------------|----------------|
| Burning Rate ⁴ (1.00 mm) | 28 mm/min | ISO 3795 |
| Flame Rating | | UL 94 |
| 0.8 mm | HB | |
| 1.6 mm | HB | |
| 3.2 mm | HB | |
| Glow Wire Flammability Index | | IEC 60695-2-12 |
| 0.8 mm | 650 °C | |
| 3.2 mm | 650 °C | |
| FMVSS Flammability ⁵ | B | FMVSS 302 |

Notes

¹ 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.

² Typical properties: these are not to be construed as specifications.

³ 50 drops

⁴ FMVSS 302

⁵ ISO 3795



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Polyamide 66

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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

