



# Edgetek™ CY1000-10GF/000 FR V0 NC702

## Polycarbonate + ABS

### Key Characteristics

| Product Description         |                                     |
|-----------------------------|-------------------------------------|
| Non-halogen flame retardant |                                     |
| General                     |                                     |
| Material Status             | • Commercial: Active                |
| Regional Availability       | • Asia Pacific                      |
| Filler / Reinforcement      | • Glass Fiber, 10% Filler by Weight |
| Additive                    | • Flame Retardant                   |
| Features                    | • Flame Retardant • Halogen Free    |
| Appearance                  | • Natural Color                     |
| Processing Method           | • Injection Molding                 |

### Technical Properties <sup>1</sup>

| Physical                                          | Typical Value (English) | Typical Value (SI) | Test Method |
|---------------------------------------------------|-------------------------|--------------------|-------------|
| Specific Gravity                                  | 1.23                    | 1.23               | ASTM D792   |
| Molding Shrinkage - Flow                          | 3.0E-3 to 5.0E-3 in/in  | 0.30 to 0.50 %     | ASTM D955   |
| Mechanical                                        | Typical Value (English) | Typical Value (SI) | Test Method |
| Tensile Strength <sup>2</sup>                     | 10900 psi               | 75.0 MPa           | ASTM D638   |
| Flexural Modulus <sup>3</sup>                     | 609000 psi              | 4200 MPa           | ASTM D790   |
| Flexural Strength <sup>3</sup>                    | 17400 psi               | 120 MPa            | ASTM D790   |
| Impact                                            | Typical Value (English) | Typical Value (SI) | Test Method |
| Notched Izod Impact                               |                         |                    | ASTM D256   |
| 73°F (23°C), 0.126 in (3.20 mm)                   | 2.2 ft-lb/in            | 120 J/m            |             |
| Thermal                                           | Typical Value (English) | Typical Value (SI) | Test Method |
| Deflection Temperature Under Load                 |                         |                    | ASTM D648   |
| 264 psi (1.8 MPa), Unannealed, 0.126 in (3.20 mm) | 248 °F                  | 120 °C             |             |
| Electrical                                        | Typical Value (English) | Typical Value (SI) | Test Method |
| Surface Resistivity                               | 1.0E+14 ohms            | 1.0E+14 ohms       | ASTM D257   |
| Flammability                                      | Typical Value (English) | Typical Value (SI) | Test Method |
| Flame Rating (0.0630 in (1.60 mm))                | V-0                     | V-0                | UL 94       |

### Processing Information

| Injection          | Typical Value (English) | Typical Value (SI) |
|--------------------|-------------------------|--------------------|
| Drying Temperature | 176 to 212 °F           | 80.0 to 100 °C     |
| Drying Time        | 3.0 to 4.0 hr           | 3.0 to 4.0 hr      |
| Rear Temperature   | 446 to 482 °F           | 230 to 250 °C      |
| Middle Temperature | 446 to 482 °F           | 230 to 250 °C      |
| Front Temperature  | 446 to 482 °F           | 230 to 250 °C      |
| Mold Temperature   | 158 to 194 °F           | 70.0 to 90.0 °C    |

| Injection Notes              |
|------------------------------|
| Injection Pressure: MED-HIGH |
| Hold Pressure: MED-HIGH      |
| Screw Speed: MODERATE        |
| Back Pressure: LOW           |

Copyright © 2015 PolyOne Corporation. PolyOne makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. PolyOne makes no warranties or guarantees respecting suitability of either PolyOne's products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. POLYONE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.

**Notes**<sup>1</sup> Typical values are not to be construed as specifications.<sup>2</sup> 0.20 in/min (5.0 mm/min)<sup>3</sup> 0.051 in/min (1.3 mm/min)**CONTACT INFORMATION****Americas**United States - Avon Lake  
+1 440 930 1000United States - McHenry  
+1 815 385 8500**Asia**China - Guangzhou  
+86 20 8732 7260China - Shenzhen  
+86 755 2969 2888China - Suzhou  
+86 512 6823 24 38China - Suzhou  
+86 512 6265 2600Hong Kong -  
+852 2690 5332Taiwan - Yonghe City,  
+886 9396 99740, +886 2929 1849**Europe**Germany - Gaggenau  
+49 7225 6802 0Spain - Barbastro (Huesca)  
+34 974 310 314*Beyond Polymers.**Better Business Solutions.™*

www.polyone.com

**PolyOne Americas**33587 Walker Road  
Avon Lake, Ohio 44012  
United States  
+1 440 930 1000  
+1 866 POLYONE**PolyOne Asia**No. 88 Guoshoujing Road  
Z.J Hi-tech Park, Pudong  
Shanghai, 201203, China  
+86 21 5080 1188**PolyOne Europe**6 Giällewee  
+352 269 050 35

Copyright ©, 2015 PolyOne Corporation. PolyOne makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. PolyOne makes no warranties or guarantees respecting suitability of either PolyOne's products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. POLYONE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.