

Trilliant[™] HC HC6010-8001 WT Polyamide 6

Key Characteristics

| Product Description | |
|-------------------------------|--|
| Glass fiber reinforced PA6 co | mpound with PTFE lubricated, health care application |
| General | |
| Material Status | Commercial: Active |
| Regional Availability | Asia Pacific |
| Filler / Reinforcement | Glass Fiber, 50% Filler by Weight |
| Additive | PTFE Lubricant |
| Features | Lubricated |
| Uses | Medical/Healthcare Applications |
| Appearance | White |
| Processing Method | Injection Molding |

Technical Properties¹

| Physical | Typical Value (English) | Typical Value (SI) | Test Method |
|--|-------------------------|--------------------|-----------------|
| Specific Gravity | 1.63 | 1.63 | ASTM D792 |
| Molding Shrinkage | 0.10 to 0.50 % | 0.10 to 0.50 % | ASTM D955 |
| Mechanical | Typical Value (English) | Typical Value (SI) | Test Method |
| Tensile Strength ² | 28300 psi | 195 MPa | ASTM D638 |
| Flexural Modulus ³ | 1.89E+6 psi | 13000 MPa | ASTM D790 |
| Flexural Strength ³ | 43500 psi | 300 MPa | ASTM D790 |
| Impact | Typical Value (English) | Typical Value (SI) | Test Method |
| Notched Izod Impact (Injection Molded) | 3.4 ft·lb/in | 180 J/m | ASTM D256 |
| Thermal | Typical Value (English) | Typical Value (SI) | Test Method |
| Deflection Temperature Under Load | | | ASTM D648 |
| 264 psi (1.8 MPa), Unannealed | 419 °F | 215 °C | |
| Electrical | Typical Value (English) | Typical Value (SI) | Test Method |
| Surface Resistivity | > 1.0E+12 ohms | > 1.0E+12 ohms | ASTM D257 |
| Flammability | Typical Value (English) | Typical Value (SI) | Test Method |
| Flame Rating (0.13 in (3.2 mm)) | HB | HB | Internal Method |

Processing Information

| Injection | Typical Value (English) | Typical Value (SI) | |
|------------------------|-------------------------|--------------------|--|
| Drying Temperature | 176 to 194 °F | 80.0 to 90.0 °C | |
| Drying Time | 2.0 to 4.0 hr | 2.0 to 4.0 hr | |
| Processing (Melt) Temp | 464 to 536 °F | 240 to 280 °C | |
| Mold Temperature | 149 to 185 °F | 65.0 to 85.0 °C | |
| | | | |

Injection Notes

Injection Pressure: MED-HIGH

Hold Pressure: MED-HIGH

Screw Speed: MODERATE

Back Pressure: LOW

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Notes

¹ Typical values are not to be construed as specifications.

² 0.20 in/min (5.0 mm/min)

³ 0.051 in/min (1.3 mm/min)

CONTACT INFORMATION

Americas United States - Avon Lake +1 440 930 1000 United States - McHenry +1 815 385 8500 Asia China - Guangzhou +86 20 8732 7260 China - Shenzhen +86 755 2969 2888 China - Suzhou +86 512 6823 24 38 China - Suzhou +86 512 6265 2600 Hong Kong -+852 2690 5332 Taiwan - Yonghe City, +886 9396 99740, +886 2929 1849 Europe Germany - Gaggenau +49 7225 6802 0 Spain - Barbastro (Huesca) +34 974 310 314

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PolyOne Americas

33587 Walker Road Avon Lake, Ohio 44012 United States +1 440 930 1000 +1 866 POLYONE PolyOne Asia No. 88 Guoshoujing Road

+86 21 5080 1188

Z.J Hi-tech Park, Pudong Shanghai, 201203, China

PolyOne Europe

6 Giällewee +352 269 050 35