



# Trilliant™ HC 2020-0001 FR

## Copolyester

### Key Characteristics

#### Product Description

The Trilliant® specialty compounds offer a complete system of specialty engineered materials, certified processes, services and technical support that enable healthcare OEM's to get to market ahead of the competition. When specified, Trilliant® compounds may incorporate agency rated materials that meet USP Class VI, FDA or ISO 10993 testing requirements.

#### General

|                       |                                           |                                          |                                   |
|-----------------------|-------------------------------------------|------------------------------------------|-----------------------------------|
| Material Status       | • Commercial: Active                      |                                          |                                   |
| Regional Availability | • Africa & Middle East<br>• Asia Pacific  | • Europe<br>• Latin America              | • North America                   |
| Features              | • Chemical Resistant<br>• Flame Retardant | • Good Colorability<br>• Specialty Grade |                                   |
| Uses                  | • Hospital Goods                          | • Housings                               | • Medical/Healthcare Applications |
| Forms                 | • Pellets                                 |                                          |                                   |
| Processing Method     | • Injection Molding                       |                                          |                                   |

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

| Physical                                          | Typical Value (English) | Typical Value (SI) | Test Method |
|---------------------------------------------------|-------------------------|--------------------|-------------|
| Density / Specific Gravity                        | 1.29                    | 1.29               | ASTM D792   |
| Molding Shrinkage - Flow                          | 5.0E-3 to 7.0E-3 in/in  | 0.50 to 0.70 %     | ASTM D955   |
| Mechanical                                        | Typical Value (English) | Typical Value (SI) | Test Method |
| Tensile Strength <sup>2</sup> (Yield)             | 6100 psi                | 42.1 MPa           | ASTM D638   |
| Tensile Elongation <sup>2</sup> (Break)           | 70 %                    | 70 %               | ASTM D638   |
| Flexural Modulus                                  | 230000 psi              | 1590 MPa           | ASTM D790   |
| Flexural Strength (Yield)                         | 10000 psi               | 68.9 MPa           | ASTM D790   |
| Impact                                            | Typical Value (English) | Typical Value (SI) | Test Method |
| Notched Izod Impact                               | 10 ft·lb/in             | 530 J/m            | ASTM D256   |
| Thermal                                           | Typical Value (English) | Typical Value (SI) | Test Method |
| Deflection Temperature Under Load                 |                         |                    | ASTM D648   |
| 66 psi (0.45 MPa), Unannealed, 0.125 in (3.18 mm) | 217 °F                  | 103 °C             |             |
| Flammability                                      | Typical Value (English) | Typical Value (SI) | Test Method |
| Flame Rating                                      |                         |                    | UL 94       |
| 0.031 in (0.79 mm)                                | V-2                     | V-2                |             |
| 0.06 in (1.6 mm)                                  | V-0                     | V-0                |             |
| 0.13 in (3.2 mm)                                  | V-0                     | V-0                |             |

### Processing Information

| Injection              | Typical Value (English) | Typical Value (SI) |
|------------------------|-------------------------|--------------------|
| Drying Temperature     | 194 °F                  | 90 °C              |
| Drying Time            | 4.0 hr                  | 4.0 hr             |
| Suggested Max Moisture | < 0.030 %               | < 0.030 %          |
| Processing (Melt) Temp | 536 °F                  | 280 °C             |
| Mold Temperature       | 104 to 176 °F           | 40 to 80 °C        |
| Injection Rate         | Slow                    | Slow               |

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**Notes**<sup>1</sup> Typical values are not to be construed as specifications.<sup>2</sup> Type I, 2.0 in/min (51 mm/min)**CONTACT INFORMATION****Americas**United States - Avon Lake  
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