

## TRIBIT® 1500G15

Samyang Corporation - Polybutylene Terephthalate

### General Information

#### Product Description

TRIBIT® is a crystalline engineering plastic with excellent processability, chemical resistance, wear resistance, and electrical properties. TRIBIT® has short processing cycle because of rapid crystallization. So it provides good dimensional stability and can be used for automotive or precision parts.

#### General

|                 |                           |                             |                 |
|-----------------|---------------------------|-----------------------------|-----------------|
| Material Status | • Commercial: Active      |                             |                 |
| Availability    | • Asia Pacific            | • Europe                    | • North America |
| Uses            | • Automotive Applications | • Automotive Interior Parts |                 |
| Forms           | • Pellets                 |                             |                 |

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

| Physical                                                | Nominal Value   | Unit     | Test Method |
|---------------------------------------------------------|-----------------|----------|-------------|
| Density / Specific Gravity                              | 1.50            |          | ASTM D792   |
| Melt Mass-Flow Rate (MFR) (250°C/5.0 kg)                | 85              | g/10 min | ASTM D1238  |
| Molding Shrinkage - Flow                                | 2.0E-3 to 0.012 | in/in    | ASTM D955   |
| Water Absorption (24 hr, 73°F)                          | 0.080           | %        | ASTM D570   |
| Mechanical                                              | Nominal Value   | Unit     | Test Method |
| Tensile Strength (Yield)                                | 15600           | psi      | ASTM D638   |
| Tensile Elongation (Break)                              | 7.0             | %        | ASTM D638   |
| Flexural Modulus                                        | 711000          | psi      | ASTM D790   |
| Flexural Strength (Yield)                               | 21300           | psi      | ASTM D790   |
| Impact                                                  | Nominal Value   | Unit     | Test Method |
| Notched Izod Impact (73°F, 0.125 in)                    | 1.3             | ft-lb/in | ASTM D256   |
| Hardness                                                | Nominal Value   | Unit     | Test Method |
| Rockwell Hardness (R-Scale)                             | 119             |          | ASTM D785   |
| Thermal                                                 | Nominal Value   | Unit     | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed)  | 437             | °F       | ASTM D648   |
| Deflection Temperature Under Load (264 psi, Unannealed) | 410             | °F       | ASTM D648   |
| CLTE - Flow                                             | 1.7E-5          | in/in/°F | ASTM D696   |
| Electrical                                              | Nominal Value   | Unit     | Test Method |
| Volume Resistivity                                      | 1.0E+16         | ohms·cm  | ASTM D257   |
| Dielectric Strength                                     | 530             | V/mil    | ASTM D149   |
| Dielectric Constant                                     | 3.20            |          | ASTM D150   |
| Dissipation Factor                                      | 0.020           |          | ASTM D150   |
| Arc Resistance                                          | 150             | sec      | ASTM D495   |
| Flammability                                            | Nominal Value   | Unit     | Test Method |
| Flame Rating                                            | HB              |          | UL 94       |

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

