# RTP 201 TFE 10

## Polyamide 66

### RTP Company

#### Message:

Warning: The status of this material is 'Commercial: Limited Issue'

The data for this material has not been recently verified.

Please contact RTP Company for current information prior to specifying this grade.

| General Information                          |   |          |             |  |
|--|---|----------|-------------|--|
| Filler / Reinforcement                       | Glass fiber reinforced material, 10% filler by weight |          |             |  |
| Additive                                     | PTFE lubricant (10%)                                  |          |             |  |
| Features                                     | Lubrication   |          |             |  |
| RoHS Compliance                              | Contact manufacturer                                  |          |             |  |
| Appearance                                   | Black   |          |             |  |
|  | Natural color   |          |             |  |
|  |   |          |             |  |
| Forms  | Particle  |          |             |  |
| Processing Method                            | Injection molding                                     |          |             |  |
| Physical                                     | Nominal Value   | Unit     | Test Method |  |
| Specific Gravity                             | 1.27  | g/cm³    | ASTM D792   |  |
| Molding Shrinkage - Flow (3.18 mm)           | 0.70  | %        | ASTM D955   |  |
| Water Absorption (23°C, 24 hr)               | 0.90  | %        | ASTM D570   |  |
| Hardness                                     | Nominal Value   | Unit     | Test Method |  |
| Rockwell Hardness (R-Scale)                  | 119   |          | ASTM D785   |  |
| Mechanical                                   | Nominal Value   | Unit     | Test Method |  |
| Tensile Modulus                              | 4830  | МРа      | ASTM D638   |  |
| Tensile Strength                             | 96.5  | MPa      | ASTM D638   |  |
| Tensile Elongation (Break)                   | 2.5   | %        | ASTM D638   |  |
| Flexural Modulus                             | 4830  | MPa      | ASTM D790   |  |
| Flexural Strength                            | 152   | MPa      | ASTM D790   |  |
| Compressive Strength                         | 100   | MPa      | ASTM D695   |  |
| Coefficient of Friction (With Metal-Dynamic) | 0.25  |          | ASTM D1894  |  |
| Impact                                       | Nominal Value   | Unit     | Test Method |  |
| Notched Izod Impact (6.35 mm)                | 59  | J/m      | ASTM D256   |  |
| Unnotched Izod Impact (6.35 mm)              | 450   | J/m      | ASTM D4812  |  |
| Thermal                                      | Nominal Value   | Unit     | Test Method |  |
| Deflection Temperature Under Load            |   |          | ASTM D648   |  |
| 0.45 MPa, not annealed                       | 243   | °C       | ASTM D648   |  |
| 1.8 MPa, not annealed                        | 238   | °C       | ASTM D648   |  |
| CLTE - Flow                                  | 4.3E-5  | cm/cm/°C | ASTM D696   |  |

| Thermal Conductivity        | 0.35          | W/m/K   | ASTM C177   |
|-----------------------------|---------------|---------|-------------|
| Electrical                  | Nominal Value | Unit    | Test Method |
| Volume Resistivity          | 1.0E+14       | ohms·cm | ASTM D257   |
| Dielectric Strength         | 20            | kV/mm   | ASTM D149   |
| Dielectric Constant (1 MHz) | 3.70          |         | ASTM D150   |
| Dissipation Factor (1 MHz)  | 0.018         |         | ASTM D150   |
| Flammability                | Nominal Value | Unit    | Test Method |
| Flame Rating (1.59 mm)      | НВ            |         | UL 94       |
| Additional Information      |               |         |             |

The value listed as Flammability, UL 94, was tested in accordance with RTP test standards.Mold Shrinkage, Linear-Flow, ASTM D-955, 0.25in.: 12mil/in.Tensile Elongation, ASTM D-638: 2-3%Flammability, ASTM D-635: B in/min.Wear Factor, K, ASTM D-3702: 70E-10in<sup>3</sup>/min/ft/lb/hrCoefficient of Friction, Dynamic, ASTM D-3702: 0.25The wear factor and dynamic coefficient of friction were both tested on thrust washer apparatus at 300 FPM, 8500 PV, against 1141 Ryex steel of hardness 18-22 Rockwell C, 12-16 micro smoothness.

| Injection              | Nominal Value | Unit |  |
|------------------------|---------------|------|--|
| Drying Temperature     | 79.4          | °C   |  |
| Drying Time            | 4.0           | hr   |  |
| Suggested Max Moisture | 0.20          | %    |  |
| Suggested Max Regrind  | 20            | %    |  |
| Rear Temperature       | 274 - 288     | °C   |  |
| Middle Temperature     | 274 - 288     | °C   |  |
| Front Temperature      | 274 - 288     | °C   |  |
| Mold Temperature       | 65.6 - 93.3   | °C   |  |
| Injection Pressure     | 82.7 - 138    | MPa  |  |

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#### Recommended distributors for this material

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