

# RTP 200A GB 20

Polyamide 6

RTP Company

Technical Data

Product Description

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

|                        |                                    |
|------------------------|------------------------------------|
| Filler / Reinforcement | • Glass Bead, 20% Filler by Weight |
| RoHS Compliance        | • Contact Manufacturer             |
| Appearance             | • Black • Natural Color            |
| Forms                  | • Pellets                          |
| Processing Method      | • Injection Molding                |

| Physical                                      | Nominal Value (English) | Nominal Value (SI) | Test Method |
|-----------------------------------------------|-------------------------|--------------------|-------------|
| Specific Gravity                              | 1.26                    | 1.26 g/cm³         | ASTM D792   |
| Molding Shrinkage - Flow (0.125 in (3.18 mm)) | 0.011 in/in             | 1.1 %              | ASTM D955   |
| Water Absorption (73°F (23°C), 24 hr)         | 1.4 %                   | 1.4 %              | ASTM D570   |

| Mechanical                 | Nominal Value (English) | Nominal Value (SI) | Test Method |
|----------------------------|-------------------------|--------------------|-------------|
| Tensile Modulus            | 500000 psi              | 3450 MPa           | ASTM D638   |
| Tensile Strength           | 10000 psi               | 68.9 MPa           | ASTM D638   |
| Tensile Elongation (Break) | 5.0 %                   | 5.0 %              | ASTM D638   |
| Flexural Modulus           | 600000 psi              | 4140 MPa           | ASTM D790   |
| Flexural Strength          | 16000 psi               | 110 MPa            | ASTM D790   |

| Impact                                     | Nominal Value (English) | Nominal Value (SI) | Test Method |
|--------------------------------------------|-------------------------|--------------------|-------------|
| Notched Izod Impact (0.125 in (3.18 mm))   | 0.80 ft·lb/in           | 43 J/m             | ASTM D256   |
| Unnotched Izod Impact (0.125 in (3.18 mm)) | 6.0 ft·lb/in            | 320 J/m            | ASTM D4812  |

| Hardness                    | Nominal Value (English) | Nominal Value (SI) | Test Method |
|-----------------------------|-------------------------|--------------------|-------------|
| Rockwell Hardness (R-Scale) | 118                     | 118                | ASTM D785   |

| Thermal                           | Nominal Value (English) | Nominal Value (SI) | Test Method |
|-----------------------------------|-------------------------|--------------------|-------------|
| Deflection Temperature Under Load |                         |                    | ASTM D648   |
| 66 psi (0.45 MPa), Unannealed     | 380 °F                  | 193 °C             |             |
| 264 psi (1.8 MPa), Unannealed     | 280 °F                  | 138 °C             |             |

| Electrical         | Nominal Value (English) | Nominal Value (SI) | Test Method |
|--------------------|-------------------------|--------------------|-------------|
| Volume Resistivity | 1.0E+14 ohm·cm          | 1.0E+14 ohm·cm     | ASTM D257   |

| Flammability                    | Nominal Value (English) | Nominal Value (SI) | Test Method |
|---------------------------------|-------------------------|--------------------|-------------|
| Flame Rating                    |                         |                    | UL 94       |
| 0.0625 in (1.59 mm), RTP Tested | HB                      | HB                 |             |

Additional Information

Molding Shrinkage, ASTM D955: 1/8 in section 0.011 in/in, ¼ in section 0.016 in/in

| Injection              | Nominal Value (English) | Nominal Value (SI) |
|------------------------|-------------------------|--------------------|
| Drying Temperature     | 175 °F                  | 79.4 °C            |
| Drying Time            | 4.0 hr                  | 4.0 hr             |
| Suggested Max Moisture | 0.20 %                  | 0.20 %             |
| Suggested Max Regrind  | 20 %                    | 20 %               |

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| Injection          | Nominal Value (English) | Nominal Value (SI) |
|--------------------|-------------------------|--------------------|
| Rear Temperature   | 425 to 560 °F           | 218 to 293 °C      |
| Middle Temperature | 425 to 560 °F           | 218 to 293 °C      |
| Front Temperature  | 425 to 560 °F           | 218 to 293 °C      |
| Mold Temperature   | 150 to 225 °F           | 65.6 to 107 °C     |
| Injection Pressure | 10000 to 15000 psi      | 68.9 to 103 MPa    |

### Notes

<sup>1</sup> These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

<sup>2</sup> Typical properties: these are not to be construed as specifications.