

# RTP 681.3

Acrylonitrile Butadiene Styrene

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.  
-Preliminary Product Data per RTP Co.-

| General Information                                                                              |                                                        |                   |             |
|--------------------------------------------------------------------------------------------------|--------------------------------------------------------|-------------------|-------------|
| Filler / Reinforcement                                                                           | Carbon fiber reinforced material, 13% filler by weight |                   |             |
| RoHS Compliance                                                                                  | Contact manufacturer                                   |                   |             |
| Appearance                                                                                       | Black                                                  |                   |             |
|                                                                                                  | Natural color                                          |                   |             |
| Forms                                                                                            | Particle                                               |                   |             |
| Processing Method                                                                                | Injection molding                                      |                   |             |
| Physical                                                                                         | Nominal Value                                          | Unit              | Test Method |
| Specific Gravity                                                                                 | 1.11                                                   | g/cm <sup>3</sup> | ASTM D792   |
| Molding Shrinkage - Flow (3.18 mm)                                                               | 0.10 - 0.20                                            | %                 | ASTM D955   |
| Water Absorption (23°C, 24 hr)                                                                   | 0.20                                                   | %                 | ASTM D570   |
| Mechanical                                                                                       | Nominal Value                                          | Unit              | Test Method |
| Tensile Modulus                                                                                  | 11700                                                  | MPa               | ASTM D638   |
| Tensile Strength                                                                                 | 75.8                                                   | MPa               | ASTM D638   |
| Tensile Elongation (Break)                                                                       | 1.0                                                    | %                 | ASTM D638   |
| Flexural Modulus                                                                                 | 5520                                                   | MPa               | ASTM D790   |
| Flexural Strength                                                                                | 110                                                    | MPa               | ASTM D790   |
| Impact                                                                                           | Nominal Value                                          | Unit              | Test Method |
| Notched Izod Impact (3.18 mm)                                                                    | 48                                                     | J/m               | ASTM D256   |
| Unnotched Izod Impact (3.18 mm)                                                                  | 210                                                    | J/m               | ASTM D4812  |
| Thermal                                                                                          | Nominal Value                                          | Unit              | Test Method |
| Deflection Temperature Under Load                                                                |                                                        |                   | ASTM D648   |
| 0.45 MPa, not annealed                                                                           | 110                                                    | °C                | ASTM D648   |
| 1.8 MPa, not annealed                                                                            | 104                                                    | °C                | ASTM D648   |
| Electrical                                                                                       | Nominal Value                                          | Unit              | Test Method |
| Surface Resistivity                                                                              | 1.0E+5                                                 | ohms              | ASTM D257   |
| Volume Resistivity                                                                               | 1.0E+2                                                 | ohms · cm         | ASTM D257   |
| Flammability                                                                                     | Nominal Value                                          | Unit              | Test Method |
| Flame Rating                                                                                     | HB                                                     |                   | UL 94       |
| Additional Information                                                                           |                                                        |                   |             |
| Mold Shrinkage, Linear-Flow, ASTM D-955, 0.25in.: 2-3mil/in.Tensile Elongation, ASTM D-638: 1-2% |                                                        |                   |             |

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature     | 82.2          | °C   |
| Drying Time            | 2.0           | hr   |
| Suggested Max Moisture | 0.10          | %    |
| Suggested Max Regrind  | 20            | %    |
| Rear Temperature       | 204 - 288     | °C   |
| Middle Temperature     | 204 - 288     | °C   |
| Front Temperature      | 204 - 288     | °C   |
| Mold Temperature       | 48.9 - 93.3   | °C   |
| Injection Pressure     | 68.9 - 138    | MPa  |
| Back Pressure          | 0.345         | MPa  |

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

