# RTP 205 AR 15 TFE 15

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, 30% filler by weight<br>Aramid fiber, 15% filler by weight | | |
| Additive | PTFE lubricant (15%) | | |
| Features | Lubrication | | |
| RoHS Compliance | Contact manufacturer | | |
| Appearance | Black<br>Natural color | | |
| Forms | Particle | | |
| Processing Method | Injection molding | | |
| **Physical** | **Nominal Value** | **Unit** | **Test Method** |
| Specific Gravity | 1.56 | g/cm³ | ASTM D792 |
| Molding Shrinkage - Flow (3.18 mm) | 0.20 | % | ASTM D955 |
| Water Absorption (23°C, 24 hr) | 0.50 | % | ASTM D570 |
| **Hardness** | **Nominal Value** | **Unit** | **Test Method** |
| Rockwell Hardness (R-Scale) | 117 | | ASTM D785 |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Modulus | 11700 | MPa | ASTM D638 |
| Tensile Strength | 169 | MPa | ASTM D638 |
| Tensile Elongation (Break) | 2.0 | % | ASTM D638 |
| Flexural Modulus | 11000 | MPa | ASTM D790 |
| Flexural Strength | 245 | MPa | ASTM D790 |
| Coefficient of Friction (With Metal-Dynamic) | 0.18 | | ASTM D1894 |
| **Impact** | **Nominal Value** | **Unit** | **Test Method** |
| Notched Izod Impact (3.18 mm) | 96 | J/m | ASTM D256 |
| Unnotched Izod Impact (3.18 mm) | 960 | 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 | 3.6E-5 | cm/cm/°C | ASTM D696 |
| Thermal Conductivity | 0.50 | W/m/K | ASTM C177 |
| **Electrical** | **Nominal Value** | **Unit** | **Test Method** |
| Volume Resistivity | 1.0E+16 | ohms·cm | ASTM D257 |
| **Flammability** | **Nominal Value** | **Unit** | **Test Method** |
| Flame Rating (1.59 mm) | HB | | 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: 3mil/in.Tensile Elongation, ASTM D-638: 2-3%Wear Factor, K, ASTM D-3702: 15E-10in$^3$/min/ft/lb/hrCoefficient of Friction, Dynamic, ASTM D-3702: 0.18The wear factor and dynamic coefficient of friction were both tested on a Falex Model No.6 Wear Testing Machine at 50 FPM, 2000 PV, against C1018 steel of hardness 15-25 Rockwell C, 14-17 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 - 107 | °C |
| Injection Pressure | 82.7 - 138 | MPa |



## 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

WECHAT