

# RTP Compounds 203 FR

## Polyamide 66

### RTP Company



# Prospector

General	
Material Status	• Commercial: Active
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America • South America
Filler / Reinforcement	• Glass Fiber Reinforcement, 20% Filler by Weight
Additive	• Flame Retardant
Features	• Flame Retardant
RoHS Compliance	• Contact Manufacturer
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Specific Gravity	1.58	1.58 g/cm <sup>3</sup>	ASTM D792
Molding Shrinkage - Flow (0.125 in (3.18 mm))	0.0020 to 0.0035 in/in	0.20 to 0.35 %	ASTM D955
Water Absorption (73°F (23°C), 24 hr)	0.70 %	0.70 %	ASTM D570

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	1.20E+6 psi	8270 MPa	ASTM D638
Tensile Strength	18500 psi	128 MPa	ASTM D638
Tensile Elongation (Yield)	2.0 to 3.0 %	2.0 to 3.0 %	ASTM D638
Flexural Modulus	1.10E+6 psi	7580 MPa	ASTM D790
Flexural Strength	30000 psi	207 MPa	ASTM D790

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (0.125 in (3.18 mm))	1.4 ft-lb/in	75 J/m	ASTM D256
Unnotched Izod Impact (0.125 in (3.18 mm))	12 ft-lb/in	640 J/m	ASTM D4812

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (R-Scale)	116	116	ASTM D785

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	475 °F	246 °C	
264 psi (1.8 MPa), Unannealed	440 °F	227 °C	

Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Volume Resistivity	> 1.0E+14 ohm-cm	> 1.0E+14 ohm-cm	ASTM D257
Dielectric Strength <sup>2</sup> (in Oil)	480 V/mil	19 kV/mm	ASTM D149
Dielectric Constant (1 MHz)	3.80	3.80	ASTM D150
Dissipation Factor (1 MHz)	0.015	0.015	ASTM D150

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating - UL (0.0315 in (0.800 mm))	V-0	V-0	UL 94
Oxygen Index	34 %	34 %	ASTM D2863

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 %
Processing (Melt) Temp	530 to 570 °F	277 to 299 °C
Mold Temperature	150 to 225 °F	65.6 to 107 °C
Injection Pressure	10000 to 18000 psi	68.9 to 124 MPa

**Injection Notes**  
 Desiccant Type Dryer Required.  
 Dew Point: 0°F

### Notes

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

<sup>2</sup> Method A (Short-Time)