

# RTP 205 H FR

Polyamide 66

RTP Company

## Technical Data

### Product Description

High Impact - Glass Fiber - Flame Retardant

### General

Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Additive	• Impact Modifier
Features	• Flame Retardant      • High Impact Resistance      • Impact Modified
RoHS Compliance	• Contact Manufacturer
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Specific Gravity	1.59	1.59 g/cm <sup>3</sup>	ASTM D792
Molding Shrinkage - Flow (0.126 in (3.20 mm))	2.0E-3 to 3.0E-3 in/in	0.20 to 0.30 %	ASTM D955
Water Absorption (73°F (23°C), 24 hr)	0.60 %	0.60 %	ASTM D570
Moisture Content	0.20 %	0.20 %	

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	1.50E+6 psi	10300 MPa	ASTM D638
Tensile Strength	16000 psi	110 MPa	ASTM D638
Tensile Elongation (Yield)	2.0 to 3.0 %	2.0 to 3.0 %	ASTM D638
Flexural Modulus	1.30E+6 psi	8960 MPa	ASTM D790
Flexural Strength	25000 psi	172 MPa	ASTM D790

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (0.126 in (3.20 mm))	2.5 ft·lb/in	130 J/m	ASTM D256
Unnotched Izod Impact (0.126 in (3.20 mm))	15 ft·lb/in	800 J/m	ASTM D4812

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (R-Scale)	114	114	ASTM D785

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	480 °F	249 °C	
264 psi (1.8 MPa), Unannealed	450 °F	232 °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>3</sup> (in Oil)	470 V/mil	19 kV/mm	ASTM D149
Dielectric Constant (1 MHz)	4.20	4.20	ASTM D150
Dissipation Factor (1 MHz)	0.013	0.013	ASTM D150

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating			UL 94
0.0591 in (1.50 mm), ** Values per RTP Company testing.	V-0	V-0	

Additional Information	Nominal Value (English)	Nominal Value (SI)
Primary Additive	30 %	30 %

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	175 °F	79.4 °C

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Time	4.0 hr	4.0 hr
Dew Point	0.00 °F	-17.8 °C
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.