

RTP Compounds 204 UV

Polyamide 66

RTP Company



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

Material Status	• Limited Issue		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America • South America
Filler / Reinforcement	• Glass Fiber Reinforcement, 25% 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	1.32	1.32	ASTM D792
Molding Shrinkage - Flow			ASTM D955
0.125 in (3.18 mm), Injection Molded	0.0030 in/in	0.30 %	
0.250 in (6.35 mm), Injection Molded	0.0060 in/in	0.60 %	
Water Absorption (24 hr, 73°F (23°C))	0.75 %	0.75 %	ASTM D570

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus (Injection Molded)	1.20E+6 psi	8270 MPa	ASTM D638
Tensile Strength	22000 psi	152 MPa	ASTM D638
Tensile Elongation (Yield, Injection Molded)	3.0 %	3.0 %	ASTM D638
Flexural Modulus (Injection Molded)	1.20E+6 psi	8270 MPa	ASTM D790
Flexural Strength (Injection Molded)	32900 psi	227 MPa	ASTM D790
Compressive Strength	19700 psi	136 MPa	ASTM D695

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256
0.125 in (3.18 mm), Injection Molded	1.20 ft-lb/in	64.0 J/m	
Unnotched Izod Impact (0.125 in (3.18 mm))	12.0 ft-lb/in	641 J/m	ASTM D256

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (R-Scale)	120	120	ASTM D785

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed, Injection Molded	489 °F	254 °C	
264 psi (1.8 MPa), Unannealed, Injection Molded	475 °F	246 °C	
CLTE - Flow	0.000022 in/in/°F	0.000040 cm/cm/°C	ASTM D696

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 ²	500 V/mil	20 kV/mm	ASTM D149
Dielectric Constant (1E+6 Hz)	3.80	3.80	ASTM D150
Dissipation Factor (1E+6 Hz)	0.017	0.017	ASTM D150
Arc Resistance	115 sec	115 sec	ASTM D495

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating - UL (0.0591 in (1.50 mm))	HB	HB	UL 94

Additional Information

The value listed as Flammability, UL 94, was tested in accordance with RTP Company methods.

Injection	Nominal Value (English)	Nominal Value (SI)
Rear Temperature	525 to 559 °F	274 to 293 °C
Middle Temperature	525 to 559 °F	274 to 293 °C
Front Temperature	525 to 559 °F	274 to 293 °C
Mold Temperature	151 to 225 °F	66.0 to 107 °C
Injection Pressure	12000 to 18000 psi	83.0 to 124 MPa

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Notes

¹ Typical properties: these are not to be construed as specifications.

² Method A (Short-Time)
