

RTP Compounds 302 FR

Polycarbonate

RTP Company

Product Description

Non-PBBO/E

General

Filler / Reinforcement	• Glass Fiber Reinforcement, 15% Filler by Weight
Additive	• Flame Retardant
Features	• Flame Retardant
RoHS Compliance	• Contact Manufacturer
Processing Method	• Injection Molding

Physical

	Nominal Value Unit	Test Method
Specific Gravity	1.30 g/cm ³	ASTM D792
Molding Shrinkage - Flow (3.18 mm)	0.20 to 0.40 %	ASTM D955
Water Absorption (23°C, 24 hr)	0.10 %	ASTM D570

Mechanical

	Nominal Value Unit	Test Method
Tensile Modulus	5170 MPa	ASTM D638
Tensile Strength	89.6 MPa	ASTM D638
Tensile Elongation (Yield)	3.0 to 5.0 %	ASTM D638
Flexural Modulus	4480 MPa	ASTM D790
Flexural Strength	131 MPa	ASTM D790

Impact

	Nominal Value Unit	Test Method
Notched Izod Impact (3.18 mm)	110 J/m	ASTM D256
Unnotched Izod Impact (3.18 mm)	640 J/m	ASTM D4812

Hardness

	Nominal Value Unit	Test Method
Rockwell Hardness (R-Scale)	118	ASTM D785

Thermal

	Nominal Value Unit	Test Method
Deflection Temperature Under Load		ASTM D648
0.45 MPa, Unannealed	146 °C	
1.8 MPa, Unannealed	141 °C	

Electrical

	Nominal Value Unit	Test Method
Volume Resistivity	> 1.0E+16 ohm·cm	ASTM D257
Dielectric Strength ² (in Oil)	19 kV/mm	ASTM D149
Dielectric Constant (1 MHz)	3.10	ASTM D150
Dissipation Factor (1 MHz)	0.0080	ASTM D150

Flammability

	Nominal Value Unit	Test Method
Flame Rating - UL (1.50 mm)	V-0	UL 94

Injection

	Nominal Value Unit
Drying Temperature - Desiccant Dryer	121 °C
Drying Time - Desiccant Dryer	4.0 hr
Dew Point - Desiccant Dryer	-28.9 °C
Suggested Max Moisture	0.020 %
Processing (Melt) Temp	288 to 316 °C
Mold Temperature	82.2 to 121 °C
Injection Pressure	68.9 to 103 MPa

Injection Notes

Desiccant Type Dryer Required.

Notes

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

² Method A (Short-Time)