



# RTP Compounds 299 X 87256 C

RTP Company - Polyamide 66

## General Information

### Product Description

Carbon Nanotube - ESD Protection - Electrically Conductive

### General

Filler / Reinforcement	• Carbon Nano Filler	
Features	• Electrically Conductive	• ESD Protection
RoHS Compliance	• Contact Manufacturer	
Forms	• Pellets	
Processing Method	• Injection Molding	

## ASTM and ISO Properties <sup>1</sup>

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Specific Gravity	1.17	1.17	ASTM D792
Molding Shrinkage (Flow, 0.126 in (3.20 mm))	0.014 to 0.017 in/in	1.4 to 1.7 %	ASTM D955
Water Absorption (24 hr, 73 °F (23 °C))	1.2 %	1.2 %	ASTM D570

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	500000 psi	3450 MPa	ASTM D638
Tensile Strength	10500 psi	72.4 MPa	ASTM D638
Tensile Elongation (Yield)	3.0 %	3.0 %	ASTM D638
Flexural Modulus	400000 psi	2760 MPa	ASTM D790
Flexural Strength	15000 psi	103 MPa	ASTM D790

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (0.126 in (3.20 mm))	0.500 ft·lb/in	26.7 J/m	ASTM D256
Unnotched Izod Impact (0.126 in (3.20 mm))	1.00 ft·lb/in	53.4 J/m	ASTM D256

Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Surface Resistivity	5.5E+4 ohms	5.5E+4 ohms	ASTM D257
Volume Resistivity	5.1E+3 ohm-cm	5.1E+3 ohm-cm	ASTM D257

### Additional Properties

Dew Point: 0°F  
 Moisture Content: 0.2%  
 Surface Resistivity, ASTM D257: 100000 to 1000000000 ohm  
 Surface Resistivity, ESD S11.11: 10000 to 100000000 ohm  
 Tensile Elongation, ASTM D638: 2 to 4%  
 Volume Resistivity, ASTM D257: 100 to 10000 ohm-cm

## Processing Information

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	175 °F	79.4 °C
Drying Time	4.0 hr	4.0 hr
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

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### Injection Notes

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Desiccant Type Dryer Required.

### Notes

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

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