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Ponciplastics.com



Product Data Sheet & General Processing Conditions

RTP 381 EM
Polycarbonate (PC)
Carbon Fiber
Easy Molding
Self Extinguishing
Halogen Free
UL94 V-2


PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	10 %	10 %	
Specific Gravity	1.22	1.22	D 792
Molding Shrinkage			
1/8 in (3.2 mm) section	0.0005 - 0.0020 in/in	0.05 - 0.20 %	D 955
Water Absorption, 24 hrs @ 23°C	0.120 %	0.120 %	D 570

MECHANICAL

Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	2.0 ft-lbs/in	107 J/m	D 256
unnotched 1/8 in (3.2 mm) section	11.0 ft-lbs/in	587 J/m	D 4812
Tensile Strength	17000 psi	117 MPa	D 638
Tensile Elongation	2.5 - 3.5 %	2.5 - 3.5 %	D 638
Tensile Modulus	1.10 x 10 ⁶ psi	7584 MPa	D 638
Flexural Strength	26000 psi	179 MPa	D 790
Flexural Modulus	1.00 x 10 ⁶ psi	6895 MPa	D 790

ELECTRICAL

Volume Resistivity	< 1E5 ohm.cm	< 1E5 ohm.cm	D 257
Surface Resistivity	< 1E6 ohm/sq	< 1E6 ohm/sq	D 257

THERMAL

Deflection Temperature			
@ 264 psi (1820 kPa)	285 °F	141 °C	D 648
@ 66 psi (455 kPa)	295 °F	146 °C	D 648
Ignition Resistance*			
Flammability	V-2 @ 1/16 in	V-2 @ 1.5 mm	UL94
Flammability	V-0 @ 1/8 in	V-0 @ 3.0 mm	UL94

PROPERTY NOTES

Data herein is typical and not to be construed as specifications.

Unless otherwise specified, all data listed is for natural or black colored materials. Pigments can affect properties.

* This rating is not intended to reflect hazards of this or any other material under actual fire conditions.

GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	10000 - 15000 psi	69 - 103 MPa
Melt Temperature	550 - 600 °F	288 - 316 °C
Mold Temperature	180 - 250 °F	82 - 121 °C
Drying	4 hrs @ 250 °F	4 hrs @ 121 °C
Moisture Content	0.02 %	0.02 %
Dew Point	-20 °F	-29 °C