



EMERGE™ PC 8702-15 (NA)

Trinseo - Advanced Resin

Tuesday, November 5, 2019

General Information

Product Description

EMERGE™ PC 8702 Advanced Resin is an ignition-resistant, 20% glass reinforced polycarbonate resin. This resin does not contain chlorine or bromine additives. It is a medium flow PC resin with a mold release system, intended for applications requiring high stiffness. EMERGE PC 8702 has a UL94 V-0 rating at 1.5 mm.

Main Characteristics:

- Glass reinforced
- Ignition resistant

Applications:

- Powered Device Housings
- Information technology equipment
- Electrical parts
- Other structural/internal parts

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight
Additive	• Mold Release
Features	• Bromine Free • Chlorine Free • Flame Retardant • Medium Flow
Uses	• Electrical Housing • Electrical/Electronic Applications • Housings • Structural Parts
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.33		ASTM D792
Melt Mass-Flow Rate (300°C/1.2 kg)	15	g/10 min	ASTM D1238
Molding Shrinkage - Flow	2.0E-3 to 4.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (0.126 in, Injection Molded)	580000	psi	ASTM D638
Tensile Strength (Break, 0.126 in, Injection Molded)	14500	psi	ASTM D638
Tensile Elongation (Break, 0.126 in, Injection Molded)	4.0	%	ASTM D638
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.126 in, Injection Molded)	2.1	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	293	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed	284	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Annealed)	289	°F	ASTM D648

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Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	3.0E+14	ohms	ASTM D257
Volume Resistivity (0.0709 in)	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength (0.0630 in)	690	V/mil	ASTM D149
Dielectric Constant (0.0630 in, 1 MHz)	3.10		ASTM D150
Comparative Tracking Index (0.118 in)	175	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating ² (0.06 in)	V-0		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	3.0 to 4.0	hr
Processing (Melt) Temp	550 to 600	°F
Mold Temperature	175 to 240	°F

Notes

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

² This rating not intended to reflect hazards presented by this or any other material under actual fire conditions.