EMERGE™ PC 8702-5

Advanced Resin

Trinseo

Message:

EMERGE™ PC 8702-5 Advanced Resin is an ignition-resistant, 20% glass reinforced, polycarbonate resin. This resin contains no bromine, chlorine, or phosphate additives. The resin is designed to meet the German norm DIN VDE-0472 on halogens. It is a medium flow PC resin with a mold release system, intended for injection molding applications.
EMERGE ™ PC 8702-5 has a UL 94 V-0 rating at 1.5 mm, 5VA rating at 3.0 mm and V2 rating at 0.75 mm.
Applications:
Information technology equipment
Electrical parts
Other structural/internal parts

General Information			
UL YellowCard	E206114-503750	E213639-100879760	
Filler / Reinforcement	Glass Fiber,20% Filler by Weight		
Additive	Mold Release		
Features	Bromine Free Chlorine Free Flame Retardant Medium Flow		
Uses	Electrical/Electronic Applications Structural Parts		
Agency Ratings	DIN VDE 0472 Part 815		
Forms	Pellets		
Processing Method	Injection Molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Density	1.33	g/cm^3	ISO 1183/B
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	5.0	g/10 min	ISO 1133
Molding Shrinkage	0.20 to 0.40	%	ISO 294-4
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	6000	MPa	ISO 527-2/50
Tensile Stress			ISO 527-2/50
Yield	100	MPa	
Break	90.0	MPa	
Tensile Strain (Break)	4.0	%	ISO 527-2/50
Flexural Modulus	5500	MPa	ISO 178
Flexural Stress	170	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (23°C)	8.5	kJ/m^2	ISO 179/1eA

Notched Izod Impact Strength (23°C)	8.0	kJ/m²	ISO 180/A
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature			
0.45 MPa, Unannealed	145	°C	ISO 75-2/B
0.45 MPa, Annealed	148	°C	ISO 75-2/B
1.8 MPa, Unannealed	140	°C	ISO 75-2/A
1.8 MPa, Annealed	143	°C	ISO 75-2/A
Vicat Softening Temperature	150	°C	ISO 306/B50
Ball Indentation Temperature	> 135	°C	IEC 60335-1
CLTE			ISO 11359-2
Flow	2.5E-5	cm/cm/°C	
Transverse	5.2E-5	cm/cm/°C	
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	3.0E+14	ohms	IEC 60093
Volume Resistivity	1.0E+16	ohms·cm	IEC 60093
Electric Strength (1.60 mm)	27	kV/mm	IEC 60243-1
Dielectric Constant			IEC 60250
1.60 mm, 10 Hz	3.10		
1.60 mm, 1 MHz	3.10		
Dissipation Factor			IEC 60250
10 Hz	5.0E-3		
100 Hz	2.5E-3		
1 MHz	0.016		
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating [1]			UL 94
0.750 mm	V-2		
1.50 mm	V-0		
	V-0		
3.00 mm	5VA		
Glow Wire Flammability Index [2]			IEC 60695-2-12
1.00 mm	960	°C	
2.00 mm	960	°C	
3.00 mm	960	°C	
Glow Wire Ignition Temperature [3]			IEC 60695-2-13
1.00 mm	850	°C	
2.00 mm	850	°C	
3.00 mm	850	°C	
Oxygen Index [4]	35	%	ISO 4589-2
Injection	**Nominal Value**	**Unit**	
Drying Temperature	120	°C	

Drying Time	3.0 to 4.0	hr
Processing (Melt) Temp	290 to 320	°C
Mold Temperature	80.0 to 120	°C

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

Recommended distributors for this material

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