

EMERGE™ PC 8110-10

Advanced Resin

Trinseo

Message:

EMERGE™ PC 8110-10 advanced resin is an opaque, ignition resistant PC resin that contains no chlorinated or brominated or phosphorous based additives. This resin combines good mechanical and high heat properties and maintains excellent processability, it contains mould release agent. EMERGE™ PC 8110-10 has a UL 94 V-0 rating at 1.0 mm.

Applications:

- Electrical
- Fixtures
- Enclosures
- Display
- Lighting

General Information			
UL YellowCard	E54680-100958203	E206114-100958194	E213639-100958177
Additive	Mold Release		
Features	Bromine Free		
	Chlorine Free		
	Flame Retardant		
	Good Processability		
	High Heat Resistance		
Uses	Electrical/Electronic Applications		
	Housings		
	Lighting Applications		
Appearance	Opaque		
Forms	Pellets		
Physical	Nominal Value	Unit	Test Method
Density	1.20	g/cm ³	ISO 1183/B
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	10	g/10 min	ISO 1133
Molding Shrinkage	0.50 to 0.70	%	ISO 294-4
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2400	MPa	ISO 527-2
Tensile Stress			ISO 527-2
Yield	60.0	MPa	
Break	70.0	MPa	
Tensile Strain			ISO 527-2
Yield	6.0	%	
Break	110	%	
Flexural Modulus	2350	MPa	ISO 178
Flexural Stress	95.0	MPa	ISO 178

Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	35	kJ/m ²	ISO 179/1eA
Notched Izod Impact Strength (23°C)	70	kJ/m ²	ISO 180/A
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
0.45 MPa, Annealed	144	°C	ISO 75-2/B
1.8 MPa, Unannealed	125	°C	ISO 75-2/A
1.8 MPa, Annealed	141	°C	ISO 75-2/A
Vicat Softening Temperature	146	°C	ISO 306/B50
Ball Indentation Temperature	> 125	°C	IEC 60335-1
CLTE - Flow	7.0E-5	cm/cm/°C	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	IEC 60093
Volume Resistivity	> 1.0E+15	ohms·cm	IEC 60093
Electric Strength	17	kV/mm	IEC 60243-1
Dielectric Constant			IEC 60250
1 Hz	2.70		
50 Hz	2.70		
Dissipation Factor			IEC 60250
1 Hz	1.0E-3		
50 Hz	1.0E-3		
Comparative Tracking Index (Solution A)	225	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating ¹			UL 94
1.00 mm	V-0		
	V-0		
2.00 mm	5VB		
	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	37	%	ISO 4589-2
Injection	Nominal Value	Unit	
Drying Temperature	120	°C	
Drying Time	3.0 to 4.0	hr	
Processing (Melt) Temp	260 to 300	°C	
Mold Temperature	70.0 to 100	°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.

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

