

Celanex® 3300LM

Polybutylene Terephthalate

Celanese Corporation

Message:

Celanex 3500LM is a 30% glass reinforced lasermarkable grade specially formulated to yield crisp marks when subjected to a Nd:YAG laser or equivalent operated at 1064nm or 532nm. Lasers operating in the UV region (355nm) may yield different results. 3300LM also offers a superior combination of mechanical, electrical, and thermal properties. This grade provides outstanding processability and good chemical resistance.

General Information			
Filler / Reinforcement	Glass fiber reinforced material, 30% filler by weight		
Features	Laser marking		
	Workability, good		
	Good electrical performance		
	Good chemical resistance		
RoHS Compliance	Contact manufacturer		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.53	g/cm ³	ASTM D792, ISO 1183
Melt Volume-Flow Rate (MVR) (250°C/2.16 kg)	17.0	cm ³ /10min	ISO 1133
Molding Shrinkage			
Flow	0.30 - 0.50	%	ASTM D955
Vertical flow direction	1.4 - 2.1	%	ISO 294-4
Flow direction	0.20 - 0.50	%	ISO 294-4
Water Absorption (Equilibrium, 23°C, 50% RH)	0.20	%	ISO 62
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	90		ISO 2039-2
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	9200	MPa	ISO 527-2/1A/1
Tensile Strength			
Fracture, 23°C	134	MPa	ASTM D638
Fracture	130	MPa	ISO 527-2/1A/5
Tensile Elongation			
Fracture, 23°C	2.0	%	ASTM D638
Fracture	2.5	%	ISO 527-2/1A/5
Flexural Modulus (23°C)	9700	MPa	ISO 178
Flexural Stress (23°C)	210	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-30°C	8.5	kJ/m ²	ISO 179/1eA

23°C	8.5	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
-30°C	45	kJ/m ²	ISO 179/1eU
23°C	46	kJ/m ²	ISO 179/1eU
Notched Izod Impact (23°C)	7.5	kJ/m ²	ISO 180/1A
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
0.45 MPa, not annealed	225	°C	ISO 75-2/B
0.45 MPa, annealed	228	°C	ASTM D648
1.8 MPa, not annealed	206	°C	ASTM D648
1.8 MPa, not annealed	205	°C	ISO 75-2/A
Glass Transition Temperature ¹	60.0	°C	ISO 11357-2
Vicat Softening Temperature	220	°C	ISO 306/B50
Melting Temperature ²	225	°C	ISO 11357-3, ASTM D3418
Linear thermal expansion coefficient			ISO 11359-2
Flow	2.5E-5	cm/cm/°C	ISO 11359-2
Lateral	1.0E-4	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
Dielectric Strength	31	kV/mm	IEC 60243-1
Relative Permittivity			IEC 60250
100 Hz	4.50		IEC 60250
1 MHz	4.10		IEC 60250
Dissipation Factor			IEC 60250
100 Hz	2.2E-3		IEC 60250
1 MHz	0.016		IEC 60250
Comparative Tracking Index	425	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating	HB		UL 94
Injection	Nominal Value	Unit	
Drying Temperature	120 - 130	°C	
Drying Time	4.0	hr	
Suggested Max Moisture	0.020	%	
Suggested Max Regrind	25	%	
Hopper Temperature	20.0 - 50.0	°C	
Rear Temperature	230 - 240	°C	
Middle Temperature	235 - 250	°C	
Front Temperature	235 - 250	°C	
Nozzle Temperature	250 - 260	°C	
Processing (Melt) Temp	235 - 260	°C	
Mold Temperature	65.0 - 93.0	°C	

Injection Rate	Moderate-Fast	
Back Pressure	0.00 - 0.345	MPa
Injection instructions		
Manifold Temperature: 250 to 260°CZone 4 Temperature: 240 to 260°CFeed Temperature: 230 to 240°C		
NOTE		
1.	10°C/min	
2.	10°C/min	

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



WECHAT