

Celanex® 4302

Polybutylene Terephthalate

Celanese Corporation

Message:

Celanex 4302 is a 30% glass reinforced PBT designed for improved mold flow, warp resistance and surface appearance.

General Information			
Filler / Reinforcement	Glass fiber reinforced material, 30% filler by weight		
Additive	Impact modifier		
Features	Impact modification		
	Bending resistance		
	Good liquidity		
	Excellent appearance		
RoHS Compliance	Contact manufacturer		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.49	g/cm ³	ASTM D792, ISO 1183
Molding Shrinkage			
Flow	0.30	%	ASTM D955
Vertical flow direction	0.40 - 0.60	%	ISO 294-4
Flow direction	0.20 - 0.40	%	ISO 294-4
Water Absorption (Equilibrium, 23°C, 50% RH)	0.15	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	8900	MPa	ISO 527-2/1A/1
Tensile Strength			
Fracture, 23°C	110	MPa	ASTM D638
Fracture	120	MPa	ISO 527-2/1A/5
Tensile Elongation			
Fracture, 23°C	3.0	%	ASTM D638
Fracture	2.8	%	ISO 527-2/1A/5
Flexural Modulus (23°C)	8700	MPa	ISO 178
Flexural Stress (23°C)	190	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-30°C	8.3	kJ/m ²	ISO 179/1eA
23°C	9.9	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
-30°C	41	kJ/m ²	ISO 179/1eU
23°C	56	kJ/m ²	ISO 179/1eU

Notched Izod Impact (23°C)	14	kJ/m ²	ISO 180/1A
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
0.45 MPa, not annealed	218	°C	ISO 75-2/B
0.45 MPa, annealed	216	°C	ASTM D648
1.8 MPa, not annealed	173	°C	ASTM D648, ISO 75-2/A
Glass Transition Temperature ¹	55.0	°C	ISO 11357-2
Melting Temperature ²	225	°C	ISO 11357-3, ASTM D3418
Linear thermal expansion coefficient			ISO 11359-2
Flow	1.8E-5	cm/cm/°C	ISO 11359-2
Lateral	1.3E-4	cm/cm/°C	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Dielectric Strength ³	21	kV/mm	ASTM D149
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		
3.	Method A (short time)		

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

