Celanex® 1400A

Polybutylene Terephthalate

Celanese Corporation

Message:

Celanex 1400A is a general purpose, unreinforced polybutylene terephthalate with a good balance of mechanical properties and processability. Celanex 1400A is a high flow material.

General Information			
UL YellowCard	E45575-239356		
Features	Workability, good High liquidity General		
Uses	General		
RoHS Compliance	Contact manufacturer		
Multi-Point Data	Isothermal Stress vs. Strain (ISO 11403-1)		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.31	g/cm³	ASTM D792, ISO 1183
Melt Mass-Flow Rate (MFR)	50	g/10 min	ASTM D1238
Molding Shrinkage			
Flow	1.8 - 2.0	%	ASTM D955
Flow direction	1.8 - 2.0	%	ISO 294-4
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (M-Scale)	72		ISO 2039-2
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	2700	MPa	ISO 527-2/1A/1
Tensile Strength			
Yield, 23°C	55.2	MPa	ASTM D638
Yield	60.0	MPa	ISO 527-2/1A/50
Fracture, 23°C	55.2	MPa	ASTM D638
Tensile Strain			
Yield	4.0	%	ISO 527-2/1A/50
Fracture, 23°C	50	%	ASTM D638
Nominal Tensile Strain at Break	38	%	ISO 527-2/1A/50
Flexural Modulus (23°C)	2200	MPa	ISO 178
Flexural Stress (23°C)	80.0	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (23°C)	3.7	kJ/m²	ISO 180/1A
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature			

0.45 MPa, not annealed	142	°C	ISO 75-2/B
0.45 MPa, annealed	154	°C	ASTM D648
1.8 MPa, not annealed	54.4	°C	ASTM D648
1.8 MPa, not annealed	58.0	°C	ISO 75-2/A
Glass Transition Temperature [1]	60.0	°C	ISO 11357-2
Melting Temperature [2]	225	°C	ISO 11357-3, ASTM D3418
CLTE - Flow	1.1E-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	ASTM D257, IEC 60093
Dielectric Strength			
-- [3]	16	kV/mm	ASTM D149
--	15	kV/mm	IEC 60243-1
Relative Permittivity (1 MHz)	3.20		IEC 60250
Dissipation Factor			
1 kHz	1.0E-3		ASTM D150
1 MHz	0.020		IEC 60250
Arc Resistance	190	sec	ASTM D495
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.750 mm)	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)		

infringement occurs, please contact us immediately.

Recommended distributors for this material

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