CALIBRE™ 2061 HD 15

Polycarbonate Resin

Trinseo

Message:

CALIBRE™ 2061 HD 15 Polycarbonate Resins are designed for steam and ethylene oxide sterilization required by the health care industry. CALIBRE™ 2061 HD 15 Polycarbonate Resins offer a level of cleanliness/clarity and melt flow consistency that is superior for those applications with critical optical performance requirements. CALIBRE™ 2061 HD 15 Polycarbonate Resin has been tested under ISO 10993 standards This product contains mold release.
Main Characteristics
Tested under ISO 10993
Applications
Medical Applications

General Information			
UL YellowCard	E54680-101090285		
Additive	Mold Release		
Features	Ethylene Oxide Sterilizable High Clarity Opticals Steam Sterilizable		
Uses	Medical/Healthcare Applications		
Agency Ratings	ISO 10993		
Forms	Pellets		
Processing Method	Injection Molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.20	g/cm³	ASTM D792, ISO 1183/B
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	15	g/10 min	ASTM D1238, ISO 1133
Molding Shrinkage - Flow	0.50 to 0.70	%	ASTM D955, ISO 294-4
Water Absorption			ASTM D570, ISO 62
23°C, 24 hr	0.15	%	
Equilibrium, 23°C, 50% RH	0.32	%	
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	118		ASTM D785
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus			
-- [1]	2300	MPa	ASTM D638
--	2300	MPa	ISO 527-2/50
Tensile Strength			
Yield [2]	62.1	MPa	ASTM D638
Yield	62.0	MPa	ISO 527-2/50
Break [3]	68.3	MPa	ASTM D638
Break	68.0	MPa	ISO 527-2/50

Tensile Elongation			
Yield [4]	6.0	%	ASTM D638
Yield	6.0	%	ISO 527-2/50
Break [5]	150	%	ASTM D638
Break	150	%	ISO 527-2/50
Flexural Modulus			
-- [6]	2400	MPa	ASTM D790
--	2400	MPa	ISO 178
Flexural Strength			
-- [7]	96.5	MPa	ASTM D790
--	96.5	MPa	ISO 178
Taber Abrasion Resistance	45	%	ASTM D1044
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (23°C)	25	kJ/m^2	ISO 179/1eA
Notched Izod Impact			
23°C	1900	J/m	ASTM D256
23°C	74	kJ/m^2	ISO 180/A
Unnotched Izod Impact (23°C)	No Break		ASTM D256, ISO 180
Instrumented Dart Impact [8] (23°C, Total Energy)	81.3	J	ASTM D3763
Tensile Impact Strength	378	kJ/m^2	ASTM D1822
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			
0.45 MPa, Annealed	139	°C	ASTM D648, ISO 75-2/B
1.8 MPa, Unannealed	120	°C	ASTM D648, ISO 75-2/A
1.8 MPa, Annealed	136	°C	ASTM D648, ISO 75-2/A
Vicat Softening Temperature			
--	148	°C	ASTM D1525 [9]
--	143	°C	ISO 306/B50
CLTE - Flow (-40 to 82°C)	6.8E-5	cm/cm/°C	ASTM D696
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	2.0E+17	ohms·cm	ASTM D257
Dielectric Strength	17	kV/mm	ASTM D149, IEC 60243-1
Dielectric Constant			ASTM D150
60 Hz	3.00		
1 MHz	3.00		
Dissipation Factor			ASTM D150
50 Hz	1.0E-3		
1 MHz	2.0E-3		
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating [10] (1.60 mm)	HB		UL 94
Optical	**Nominal Value**	**Unit**	**Test Method**

Refractive Index	1.586		ASTM D542, ISO 489
Transmittance	89.0	%	ASTM D1003
Haze	0.60	%	ASTM D1003

NOTE	
1.	50 mm/min
2.	50 mm/min
3.	50 mm/min
4.	50 mm/min
5.	50 mm/min
6.	Method I (3 point load), 2.0 mm/min
7.	Method I (3 point load), 2.0 mm/min
8.	3.39 m/sec
9.	Rate A (50°C/h), Loading 2 (50 N)
10.	This rating not intended to reflect hazards presented by this or any other material under actual fire conditions.

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