

CALIBRE™ 2061-3

Polycarbonate Resin

Trinseo

Message:

CALIBRE™ 2061-3 Polycarbonate resin is used in medical applications involving steam or ethylene oxide sterilization - though suitability for use in these applications is dependent upon autoclave cycle times and temperatures. CALIBRE 2061-3 provides exceptional clarity, heat resistance, impact strength, and processability, and has low contamination levels. CALIBRE 2061 has been evaluated by certain biocompatibility tests based on ISO 10993-1 (Biological Evaluation of Medical Devices) and is suitable for use in approved medical applications. This product contains mold release.

Main Characteristics

Tested under ISO 10993

Applications

Medical Applications

General Information			
Additive	Mold Release		
Features	Ethylene Oxide Sterilizable		
	Good Processability		
	High Clarity		
	High Heat Resistance		
	High Impact Resistance		
	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)	3.5	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			ASTM D785
M-Scale	74		
R-Scale	118		
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-- ¹	2480	MPa	ASTM D638
--	2480	MPa	ISO 527-2/50
Tensile Strength			

Yield ²	60.0	MPa	ASTM D638
Yield	60.0	MPa	ISO 527-2/50
Break ³	72.0	MPa	ASTM D638
Break	72.4	MPa	ISO 527-2/50
Tensile Elongation			
Break ⁴	150	%	ASTM D638
Break	150	%	ISO 527-2/50
Flexural Modulus			
-- ⁵	2410	MPa	ASTM D790
--	2410	MPa	ISO 178
Flexural Strength			
-- ⁶	96.5	MPa	ASTM D790
--	96.0	MPa	ISO 178
Taber Abrasion Resistance	45	%	ASTM D1044
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			
23°C	960	J/m	ASTM D256
23°C	93	kJ/m ²	ISO 180/A
Unnotched Izod Impact (23°C)	No Break		ASTM D256, ISO 180
Instrumented Dart Impact ⁷ (23°C, Total Energy)	93.8	J	ASTM D3763
Tensile Impact Strength	630	kJ/m ²	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Annealed	146	°C	ASTM D648, ISO 75-2/B
1.8 MPa, Unannealed	132	°C	ASTM D648, ISO 75-2/A
1.8 MPa, Annealed	143	°C	ASTM D648, ISO 75-2/A
Vicat Softening Temperature	151	°C	ISO 306/B50, ASTM D1525 ⁸
CLTE - Flow (-40 to 82°C)	6.8E-5	cm/cm/°C	ASTM D696
Flammability	Nominal Value		Test Method
Flame Rating			UL 94
3.00 mm	HB		
0.750 mm	V-2		
1.50 mm	V-2		
NOTE			
1.	50 mm/min		
2.	50 mm/min		
3.	50 mm/min		
4.	50 mm/min		
5.	Method I (3 point load), 2.0 mm/min		

6.	Method I (3 point load), 2.0 mm/min
7.	3.39 m/sec
8.	Rate A (50°C/h), Loading 2 (50 N)

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

