CALIBRE™ 603-6

Polycarbonate Resin

Trinseo

Message:

CALIBRE™ 603-6 Polycarbonate Resin is a branched polycarbonate resin specially designed for multi-wall sheet extrusion. CALIBRE 603-6 offers a high melt strength to calibrate effectively a wide range of multi-wall sheet structures from low to high complexity, such as seven wall sheet. CALIBRE 603-6 offers a wider processing window than CALIBRE 503-5 and is likewise specially designed to give excellent sheet surface quality at high line speeds with a reduced tendency to display chatter marks. CALIBRE 603-6 contains a UV absorber additive, but sheets for outdoor applications require a protective UV-absorbing cap layer. It is recommended to coextrude a 50 micron thick cap layer from CALIBRE 320UV.
Main Characteristics:
Wide processing window
High surface quality
Minimizes chatter marks
Applications:
Low to high complexity multi-wall sheets

General Information			
UL YellowCard	E54680-469977		
Features	Good Melt Strength		
Uses	Sheet		
Forms	Pellets		
Physical	**Nominal Value**	**Unit**	**Test Method**
Density	1.20	g/cm³	ISO 1183/B
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	6.0	g/10 min	ISO 1133
Molding Shrinkage - Flow	0.50 to 0.70	%	ISO 294-4
Water Absorption			ISO 62
23°C, 24 hr	0.15	%	
Equilibrium, 23°C, 50% RH	0.32	%	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	2350	MPa	ISO 527-2/50
Tensile Stress			ISO 527-2/50
Yield	62.0	MPa	
Break	66.0	MPa	
Tensile Strain (Yield)	6.0	%	ISO 527-2/50
Flexural Modulus [1]	2400	MPa	ISO 178
Flexural Stress [2]	93.0	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-30°C	16	kJ/m²	
23°C	55	kJ/m²	
Notched Izod Impact Strength			ISO 180/A
-30°C	15	kJ/m²	
23°C	80	kJ/m²	

Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
0.45 MPa, Annealed	145	°C	ISO 75-2/B
1.8 MPa, Unannealed	126	°C	ISO 75-2/A
1.8 MPa, Annealed	142	°C	ISO 75-2/A
Vicat Softening Temperature	150	°C	ISO 306/B50
CLTE - Flow	7.0E-5	cm/cm/°C	ISO 11359-2
Electrical	**Nominal Value**	**Unit**	**Test Method**
Comparative Tracking Index (2.00 mm, Solution A)	250	V	IEC 60112
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating [3]			UL 94
1.50 mm	HB		
3.00 mm	HB		
Glow Wire Flammability Index [4]			IEC 60695-2-12
1.00 mm	900	°C	
2.00 mm	875	°C	
3.00 mm	875	°C	
Glow Wire Ignition Temperature [5]			IEC 60695-2-13
1.00 mm	800	°C	
2.00 mm	775	°C	
3.00 mm	775	°C	
Optical	**Nominal Value**	**Unit**	**Test Method**
Refractive Index	1.586		ISO 489
Transmittance	86.0 to 90.0	%	ASTM D1003
Haze	1.0	%	ASTM D1003

NOTE	
1.	2.0 mm/min
2.	2.0 mm/min
3.	This rating not intended to reflect hazards presented by this or any other material under actual fire conditions.
4.	This rating not intended to reflect hazards presented by this or any other material under actual fire conditions.
5.	This rating not intended to reflect hazards presented by this or any other material under actual fire conditions.

Recommended distributors for this material

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