CALIBRE™ 603-3

Polycarbonate Resin

Trinseo

Message:

CALIBRE™ 603-3 is a branched polycarbonate resin specially designed for extrusion of profiles, corrugated sheet and very complex multi-wall sheet. CALIBRE™ 603-3 offers a very high melt strength to calibrate effectively the most complex multi-wall sheet structures, such as a seven wall sheet or more, and to calibrate effectively complex profiles and corrugated sheet. CALIBRE™ 603-3 contains a UV absorber additive, but note that sheets for outdoor applications also require a protective UV-absorbing cap layer. It is recommended to coextrude a 50 µm thick cap layer, using CALIBRE™ 320UV.
Main Characteristics:
Very high melt strength
Good impact resistance
Applications:
Complex multi-wall sheet
Profiles

General Information	
UL YellowCard	E54680-469977
Additive	UV Stabilizer
Features	Good Impact Resistance Good Melt Strength
Uses	Sheet
Forms	Pellets
Processing Method	Blow Molding Extrusion Blow Molding Film Extrusion Injection Blow Molding Profile Extrusion Sheet Extrusion

Physical	Nominal Value	Unit	Test Method
Density	1.20	g/cm³	ISO 1183/B
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	3.0	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	2300	MPa	ISO 527-2/50
Tensile Stress			ISO 527-2/50
Yield	62.0	MPa	
Break	66.0	MPa	
Tensile Strain			ISO 527-2/50

Yield	6.0	%	
Break	90	%	
Flexural Modulus [1]	2300	MPa	ISO 178
Flexural Stress [2]	94.0	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-30°C	16	kJ/m^2	
23°C	55	kJ/m^2	
Notched Izod Impact Strength			ISO 180/A
-30°C	15	kJ/m^2	
23°C	80	kJ/m^2	
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	775	°C	
2.00 mm	775	°C	
3.00 mm	775	°C	
Optical	**Nominal Value**	**Unit**	**Test Method**
Refractive Index	1.586		ISO 489
Transmittance	89.0	%	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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