

SABIC Innovative Plastics PC2200 PC

Category : Polymer , Thermoplastic , Polycarbonate (PC)

Material Notes:

PC2200 resin is a high flow (MFR = 22 at 300°C/1.2kg), heat stabilized, polycarbonate product designed for use in the custom compounding market. It does not contain UV stabilizer or mold release. This data was supplied by SABIC-IP for the Americas region.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-PC2200-PC.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.20 g/cc	1.20 g/cc	ASTM D 792
Density	1.20 g/cc	0.0434 lb/in ³	ISO 1183
Moisture Absorption at Equilibrium	0.35 % @Temperature 23.0 °C	0.35 % @Temperature 73.4 °F	ASTM D 570
Water Absorption at Saturation	0.35 % @Temperature 23.0 °C	0.35 % @Temperature 73.4 °F	ISO 62
Linear Mold Shrinkage, Flow	0.0050 - 0.0070 cm/cm	0.0050 - 0.0070 in/in	on tensile bar; SABIC Method
	0.0050 - 0.0070 cm/cm @Thickness 3.20 mm	0.0050 - 0.0070 in/in @Thickness 0.126 in	SABIC Method
Melt Flow	21 g/10 min @Load 1.20 kg, Temperature 300 °C	21 g/10 min @Load 2.65 lb, Temperature 572 °F	[cm ³ /10 min] Melt Volume Rate; ISO 1133
	22 g/10 min @Load 1.20 kg, Temperature 300 °C	22 g/10 min @Load 2.65 lb, Temperature 572 °F	ASTM D 1238

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	120	120	ISO 2039-2
	120	120	ASTM D 785
Tensile Strength, Yield	63.0 MPa	9140 psi	Type I, 50 mm/min; ASTM D 638
	63.0 MPa	9140 psi	50 mm/min; ISO 527
Elongation at Break	>= 70 %	>= 70 %	50 mm/min; ISO 527
	>= 70 %	>= 70 %	Type I, 50 mm/min; ASTM D 638
Elongation at Yield	6.0 %	6.0 %	Type I, 50 mm/min; ASTM D 638

Mechanical Properties	Metric	English	Comments
Tensile Modulus	2.35 GPa	341 ksi	1 mm/min; ISO 527
	2.35 GPa	341 ksi	50 mm/min; ASTM D 638
Flexural Yield Strength	90.0 MPa	13100 psi	2 mm/min; ISO 178
	90.0 MPa	13100 psi	1.3 mm/min, 50 mm span; ASTM D 790
Flexural Modulus	2.30 GPa	334 ksi	2 mm/min; ISO 178
	2.30 GPa	334 ksi	1.3 mm/min, 50 mm span; ASTM D 790
Izod Impact, Notched	6.40 J/cm	12.0 ft-lb/in	ASTM D 256
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Izod Impact, Unnotched	NB	NB	ASTM D 4812
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Izod Impact, Notched (ISO)	12.0 kJ/m ²	5.71 ft-lb/in ²	80*10*3; ISO 180/1A
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Izod Impact, Notched (ISO)	65.0 kJ/m ²	30.9 ft-lb/in ²	80*10*3; ISO 180/1A
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Izod Impact, Unnotched (ISO)	NB	NB	80*10*3; ISO 180/1U
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Izod Impact, Unnotched (ISO)	NB	NB	80*10*3; ISO 180/1U
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Impact Test	55.0 J	40.6 ft-lb	Instrumented Impact Energy @ peak; ASTM D 3763
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	70.0 µm/m-°C	38.9 µin/in-°F	ISO 11359-2
	@Temperature 23.0 - 80.0 °C	@Temperature 73.4 - 176 °F	
CTE, linear, Parallel to Flow	70.0 µm/m-°C	38.9 µin/in-°F	ASTM E 831
	@Temperature -40.0 - 95.0 °C	@Temperature -40.0 - 203 °F	
Thermal Conductivity	0.200 W/m-K	1.39 BTU-in/hr-ft ² -°F	ASTM C 177
	0.200 W/m-K	1.39 BTU-in/hr-ft ² -°F	ISO 8302

Thermal Properties	Metric	English	Comments
Deflection Temperature at 0.46 MPa (66 psi)	133 °C	271 °F	Flatw 80*10*4 sp=64mm; ISO 75/Bf
	133 °C @Thickness 3.20 mm	271 °F @Thickness 0.126 in	ASTM D 648
Deflection Temperature at 1.8 MPa (264 psi)	122 °C	252 °F	Flatw 80*10*4 sp=64mm; ISO 75/Af
	122 °C @Thickness 3.20 mm	252 °F @Thickness 0.126 in	ASTM D 648
Vicat Softening Point	140 °C	284 °F	Rate B/50; ASTM D 1525
	140 °C	284 °F	Rate B/50; ISO 306

Optical Properties	Metric	English	Comments
Refractive Index	1.586	1.586	ASTM D 542
	1.586	1.586	ISO 489
Haze	<= 0.80 % @Thickness 2.54 mm	<= 0.80 % @Thickness 0.100 in	ASTM D 1003
Transmission, Visible	88 - 90 % @Thickness 2.54 mm	88 - 90 % @Thickness 0.100 in	ASTM D 1003

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+15 ohm-cm	>= 1.00e+15 ohm-cm	ASTM D 257
	>= 1.00e+15 ohm-cm	>= 1.00e+15 ohm-cm	IEC 60093
Dielectric Constant	3.0 @Frequency 60.0 Hz	3.0 @Frequency 60.0 Hz	ASTM D 150
	3.0 @Frequency 1.00e+6 Hz	3.0 @Frequency 1.00e+6 Hz	ASTM D 150
	3.0 @Frequency 60.0 Hz	3.0 @Frequency 60.0 Hz	IEC 60250
	3.0 @Frequency 1.00e+6 Hz	3.0 @Frequency 1.00e+6 Hz	IEC 60250
Dielectric Strength	27.0 kV/mm	686 kV/in	IEC 60243-1

Electrical Properties	Metric @Thickness 1.60 mm	English @Thickness 0.0630 in	Comments
	27.0 kV/mm	686 kV/in	ASTM D 149
	@Thickness 1.60 mm	@Thickness 0.0630 in	
Dissipation Factor	0.0010	0.0010	IEC 60250
	@Frequency 60.0 Hz	@Frequency 60.0 Hz	
	0.0010	0.0010	ASTM D 150
	@Frequency 60.0 Hz	@Frequency 60.0 Hz	
	0.010	0.010	ASTM D 150
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
	0.010	0.010	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	

Descriptive Properties	Value	Comments
Ball Pressure Test, 125°C +/- 2°C	Passes	IEC 60695-10-2

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China