

SABIC Innovative Plastics Cycology® C4220K PC+ABS (Asia Pacific)

Category : Polymer , Thermoplastic , ABS Polymer , Polycarbonate/ABS Alloy, Glass Fiber Filled , Polycarbonate (PC)

Material Notes:

Cycology* C4220K resin is an injection moldable 20% glass reinforced non FR PC-ABS. Key features include improved Knit Line strength, good flow, excellent strength & rigidity, heat resistance & hydrolytic stability. Ideal for small to medium size & thin wall applications that required rigid frame for reinforcement with good Knit Line strength. This data was supplied by SABIC-IP for the Asia Pacific region.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Cycology-C4220K-PCABS-Asia-Pacific.php

Physical Properties	Metric	English	Comments
Density	1.30 g/cc	0.0470 lb/in ³	ISO 1183
Moisture Absorption at Equilibrium	0.12 %	0.12 %	23°C / 50% RH; ISO 62
Water Absorption at Saturation	0.60 % @Temperature 23.0 °C	0.60 % @Temperature 73.4 °F	ISO 62
Linear Mold Shrinkage, Flow	0.0020 - 0.0040 cm/cm @Thickness 3.20 mm	0.0020 - 0.0040 in/in @Thickness 0.126 in	SABIC Method
Melt Flow	11 g/10 min @Load 5.00 kg, Temperature 260 °C	11 g/10 min @Load 11.0 lb, Temperature 500 °F	[cm ³ /10 min] Melt Volume Rate; ISO 1133
	12 g/10 min @Load 5.00 kg, Temperature 260 °C	12 g/10 min @Load 11.0 lb, Temperature 500 °F	ASTM D 1238

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell L	96	96	ISO 2039-2
Hardness, Rockwell R	119	119	ISO 2039-2
Tensile Strength at Break	95.0 MPa	13800 psi	5 mm/min; ISO 527
Tensile Strength, Yield	95.0 MPa	13800 psi	5 mm/min; ISO 527
Elongation at Break	2.5 %	2.5 %	5 mm/min; ISO 527
Elongation at Yield	2.5 %	2.5 %	5 mm/min; ISO 527
Tensile Modulus	6.00 GPa	870 ksi	1 mm/min; ISO 527
Flexural Yield Strength	125 MPa	18100 psi	2 mm/min; ISO 178
Flexural Modulus	5.40 GPa	783 ksi	2 mm/min; ISO 178

Mechanical Properties	Metric	English	Comments
Izod Impact, Notched	@Temperature 23.0 °C	@Temperature 73.4 °F	ASTM D 256
Izod Impact, Unnotched	5.50 J/cm @Temperature 23.0 °C	10.3 ft-lb/in @Temperature 73.4 °F	ASTM D 4812
Izod Impact, Notched (ISO)	10.0 kJ/m² @Temperature 23.0 °C	4.76 ft-lb/in² @Temperature 73.4 °F	80*10*3; ISO 180/1A
Izod Impact, Unnotched (ISO)	25.0 kJ/m² @Temperature 23.0 °C	11.9 ft-lb/in² @Temperature 73.4 °F	80*10*3; ISO 180/1U
Charpy Impact Unnotched	2.50 J/cm² @Temperature 23.0 °C	11.9 ft-lb/in² @Temperature 73.4 °F	Edgew 80*10*3 sp=62mm; ISO 179/1eU
Charpy Impact, Notched	1.00 J/cm² @Temperature 23.0 °C	4.76 ft-lb/in² @Temperature 73.4 °F	V-notch Edgew 80*10*3 sp=62mm; ISO 179/1eA

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	26.2 µm/m-°C @Temperature -40.0 - 40.0 °C	14.6 µin/in-°F @Temperature -40.0 - 104 °F	ISO 11359-2
CTE, linear, Transverse to Flow	81.6 µm/m-°C @Temperature -40.0 - 40.0 °C	45.3 µin/in-°F @Temperature -40.0 - 104 °F	ISO 11359-2
Thermal Conductivity	0.200 W/m-K	1.39 BTU-in/hr-ft²-°F	ISO 8302
Deflection Temperature at 0.46 MPa (66 psi)	135 °C	275 °F	Edgew 120*10*4 sp=100mm; ISO 75/Be
	138 °C @Thickness 3.20 mm	280 °F @Thickness 0.126 in	unannealed; ASTM D 648
Deflection Temperature at 1.8 MPa (264 psi)	129 °C	264 °F	Edgew 120*10*4 sp=100mm; ISO 75/Ae
	130 °C @Thickness 3.20 mm	266 °F @Thickness 0.126 in	unannealed; ASTM D 648
Vicat Softening Point	135 °C	275 °F	Rate B/50; ISO 306
	137 °C	279 °F	Rate B/120; ISO 306

Electrical Properties	Metric	English	Comments
Volume Resistivity	3.50e+16 ohm-cm	3.50e+16 ohm-cm	ASTM D 257

Electrical Properties	Metric	English	Comments
Surface Resistance	3.00e+16 ohm	3.00e+16 ohm	ASTM D 257
Dielectric Constant	3.3	3.3	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
	3.4	3.4	IEC 60250
	@Frequency 1000 Hz	@Frequency 1000 Hz	
Dielectric Strength	30.0 kV/mm	762 kV/in	in oil; IEC 60243-1
	@Thickness 1.60 mm	@Thickness 0.0630 in	
	40.0 kV/mm	1020 kV/in	in oil; IEC 60243-1
	@Thickness 0.800 mm	@Thickness 0.0315 in	
Dissipation Factor	0.0080	0.0080	IEC 60250
	@Frequency 1000 Hz	@Frequency 1000 Hz	
	0.011	0.011	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	

Descriptive Properties	Value	Comments
Ball Pressure Test, 125°C +/- 2°C	pass	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