

Hippe PC Polycarbonate

Category : Polymer , Thermoplastic , Polycarbonate (PC)

Material Notes:

Hard, stiff, very good impact properties with a wide range of temperature (to -100°C). High stability of shape under heat. Clear with own slight yellowish color. Low water absorption, weather-resistant. Physiologically acceptable. Information provided by Hippe.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Hippe-PC-Polycarbonate.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.20 g/cc	1.20 g/cc	DIN 53 479
Moisture Absorption at Equilibrium	0.15 %	0.15 %	Absorption of humidity in standard operating environment; DIN 53 715
Water Absorption at Saturation	0.35 %	0.35 %	DIN 53 495

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	100 MPa @Time 30.0 sec	14500 psi @Time 0.00833 hour	DIN 53 456
Tensile Strength	65.0 MPa	9430 psi	DIN 53 455
Elongation at Break	60 - 100 %	60 - 100 %	DIN 53 455
Tensile Modulus	2.20 GPa	319 ksi	DIN 53 457
Charpy Impact, Notched	NB	NB	DIN 53 453
Coefficient of Friction, Dynamic	0.52 - 0.58	0.52 - 0.58	Against steel, p=0.05 N/mm ² , v=0.6 m/s, hardened and ground
Abrasion	22	22	µm/km; Against steel, p=0.05 N/mm ² , v=0.6 m/s, hardened and ground

Thermal Properties	Metric	English	Comments
CTE, linear	60.0 - 70.0 µm/m-°C	33.3 - 38.9 µin/in-°F	
Specific Heat Capacity	1.20 J/g-°C	0.287 BTU/lb-°F	
Thermal Conductivity	0.190 W/m-K	1.32 BTU-in/hr-ft ² -°F	
Maximum Service Temperature, Air	120 °C	248 °F	Continuous use
	140 °C	284 °F	Short Periods
Deflection Temperature at 0.46 MPa (66 psi)	140 °C	284 °F	ISO-R 75 Method B

Thermal Properties <small>Deflection Temperature at 1.8 MPa (104 psi)</small>	Metric <small>125 °C</small>	English <small>275 °F</small>	Comments <small>ISO 9735 Method A</small>
Glass Transition Temp, Tg	145 °C	293 °F	dynamic; DIN 53 736
Flammability, UL94	V-2	V-2	

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+17 ohm-cm	1.00e+17 ohm-cm	DIN 53 482, VDE 0303, Part 3
Surface Resistance	1.00e+15 ohm	1.00e+15 ohm	DIN 53 482
Dielectric Constant	3.0 @Frequency 1.00e+6 Hz	3.0 @Frequency 1.00e+6 Hz	DIN 53 483, IEC-250
Dielectric Strength	27.0 kV/mm	686 kV/in	Breakdown; DIN 53 481, IEC-243, VDE 0303 Part 1
Dielectric Loss Index	0.0060 @Frequency 1.00e+6 Hz	0.0060 @Frequency 1.00e+6 Hz	DIN 53 483, IEC-250

Descriptive Properties	Value	Comments
Color	transparent	
Creep Resistance	Grade CTI 350	DIN 53 480, IEC-112, VDE 0303 Part 1
Resistance to hot water, suds	not resistant	

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