

Styron CALIBRE 303V-10 Polycarbonate Resin

Category : Polymer , Thermoplastic , Polycarbonate (PC)

Material Notes:

Overview: CALIBRE 300V-10 Polycarbonate resins offer exceptional impact resistance, heat distortion resistance, optical clarity and meets UL94 V-2 rating. CALIBRE 300V series products are available in 3 additive packages: CALIBRE 301V: Mold release. CALIBRE 302V: UV stabilizer. CALIBRE 303V: Mold release and UV stabilizer. Govt. and Industry Standards: CSA (Canadian Standards Association) Underwriters Laboratory Inc. (UL) Applications: Electronic components Lighting Storage Media Housings Information provided by Styron

Order this product through the following link:

http://www.lookpolymers.com/polymer_Styron-CALIBRE-303V-10-Polycarbonate-Resin.php

Physical Properties	Metric	English	Comments
Density	1.20 g/cc	0.0434 lb/in ³	ISO 1183/B; ASTM D792
Water Absorption	0.25 % @Temperature 23.0 °C	0.25 % @Temperature 73.4 °F	Equilibrium, 50% RH; ISO 62; ASTM D570
	0.15 % @Temperature 23.0 °C, Time 86400 sec	0.15 % @Temperature 73.4 °F, Time 24.0 hour	
Linear Mold Shrinkage, Flow	0.0050 - 0.0070 cm/cm	0.0050 - 0.0070 in/in	ISO 294-4; ASTM D955
Melt Flow	10 g/10 min	10 g/10 min	ASTM D1238
	10 g/10 min @Load 1.20 kg, Temperature 300 °C	10 g/10 min @Load 2.65 lb, Temperature 572 °F	

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	71.0 MPa	10300 psi	ISO 527-2/50; ASTM D638
Tensile Strength, Yield	60.0 MPa	8700 psi	ISO 527-2/50; ASTM D638
Elongation at Break	150 %	150 %	ISO 527-2/50; ASTM D638
Elongation at Yield	6.0 %	6.0 %	ISO 527-2/50; ASTM D638
Tensile Modulus	2.30 GPa	334 ksi	ISO 527-2/50
	2.41 GPa	350 ksi	ASTM D638
Flexural Strength	96.5 MPa	14000 psi	ASTM D790

Mechanical Properties	97.0 MPa Metric	14100 psi English	2.0 mm/min; ISO 178 Comments
Flexural Modulus	2.40 GPa	348 ksi	2.0 mm/min; ISO 178
	2.41 GPa	350 ksi	ASTM D790
Izod Impact, Notched	9.10 J/cm @Temperature 23.0 Â°C	17.0 ft-lb/in @Temperature 73.4 Â°F	ISO 180/4A
Izod Impact, Unnotched (ISO)	NB @Temperature 23.0 Â°C	NB @Temperature 73.4 Â°F	ASTM D256; ISO 180
Charpy Impact, Notched	3.50 J/cmÂ² @Temperature 23.0 Â°C	16.7 ft-lb/inÂ² @Temperature 73.4 Â°F	ISO 179/1eA
Dart Drop, Total Energy	87.0 J	64.2 ft-lb	ASTM D3763
Abrasion	45	45	[%] Taber; ASTM D1044

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	68.0 Âµm/m-Â°C	37.8 Âµin/in-Â°F	ASTM D696
Hot Ball Pressure Test	125 Â°C	257 Â°F	IEC 60335-1
Deflection Temperature at 0.46 MPa (66 psi)	141 Â°C	286 Â°F	Annealed; ISO 75-2/B; ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	122 Â°C	252 Â°F	Unannealed; ISO 75-2/A
	125 Â°C	257 Â°F	Unannealed; ASTM D648
	138 Â°C	280 Â°F	Annealed; ASTM D648
	143 Â°C	289 Â°F	Annealed; ISO 75-2/A
Vicat Softening Point	146 Â°C	295 Â°F	ISO 306/B50; ASTM D1525
Flammability, UL94	V-2 @Thickness 1.60 mm	V-2 @Thickness 0.0630 in	
	V-2 @Thickness 3.20 mm	V-2 @Thickness 0.126 in	
Oxygen Index	26 %	26 %	ISO 4289-2

Optical Properties	Metric	English	Comments
--------------------	--------	---------	----------

Refractive Index Optical Properties	1.586 Metric	1.586 English	ASTM D542; ISO 489 Comments
Haze	1.0 %	1.0 %	ASTM D1003
Transmission, Visible	89 %	89 %	ASTM D1003

Electrical Properties	Metric	English	Comments
Volume Resistivity	2.00e+17 ohm-cm	2.00e+17 ohm-cm	ASTM D257
Dielectric Constant	3.0	3.0	ASTM D150
	@Frequency 60.0 Hz	@Frequency 60.0 Hz	
Dielectric Strength	3.0	3.0	ASTM D150
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Dissipation Factor	17.0 kV/mm	432 kV/in	ASTM D149
	17.0 kV/mm	432 kV/in	IEC 60243-1
Comparative Tracking Index	0.0010	0.0010	ASTM D150
Comparative Tracking Index	250 V	250 V	Solution A; IEC 60112
	@Thickness 2.00 mm	@Thickness 0.0787 in	

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