

Styron CALIBRE® 893-10 Polycarbonate

Category : Polymer , Thermoplastic , Polycarbonate (PC)

Material Notes:

CALIBRE® 893-10 resin provides superior ignition resistance in opaque applications. Applications: Portable/cellular phones Pagers Data Enclosures Computer housings, keyboards Structural components Business equipment Information provided by Dow This product line was spun off from Dow Chemical to Styron in 2010.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Styron-CALIBRE-893-10-Polycarbonate.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.20 g/cc	1.20 g/cc	ASTM D792
Water Absorption	0.15 %	0.15 %	23Â°C, 24hrs; ASTM D570
Water Absorption at Saturation	0.32 %	0.32 %	23Â°C, 50% RH; ASTM D570
Linear Mold Shrinkage	0.0050 - 0.0070 cm/cm	0.0050 - 0.0070 in/in	ASTM D955
Melt Flow	10 g/10 min @Load 1.20 kg, Temperature 300 Â°C	10 g/10 min @Load 2.65 lb, Temperature 572 Â°F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	59	59	ASTM D785
Hardness, Rockwell R	123	123	ASTM D785
Tensile Strength, Ultimate	58.6 MPa	8500 psi	50 mm/min; ASTM D638
Tensile Strength, Yield	61.4 MPa	8900 psi	50 mm/min; ASTM D638
Elongation at Break	115 %	115 %	50 mm/min; ASTM D638
Tensile Modulus	2.38 GPa	345 ksi	50 mm/min; ASTM D638
Flexural Strength	97.9 MPa	14200 psi	3-points, 2 mm/min; ASTM D790
Flexural Modulus	2.33 GPa	338 ksi	3-points, 2 mm/min; ASTM D790
Izod Impact, Notched	6.94 J/cm	13.0 ft-lb/in	ASTM D256
Tensile Impact	160 J/cm	300 ft-lb/in	ASTM D1822
Dart Drop, Total Energy	62.0 J	45.7 ft-lb	8000 ipm; ASTM D3763

Thermal Properties	Metric	English	Comments
--------------------	--------	---------	----------

Thermal Properties CTE, linear	64.8 Âµm/m-Â°C Metric	36.0 Âµin/in-Â°F English	Comments ASTM D696
	@Temperature -40.0 - 82.2 Â°C	@Temperature -40.0 - 180 Â°F	
Deflection Temperature at 0.46 MPa (66 psi)	137 Â°C	279 Â°F	annealed; ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	127 Â°C	260 Â°F	annealed; ASTM D648
Vicat Softening Point	151 Â°C	304 Â°F	50Â°C/hr, 50N; ASTM D1525
Flammability, UL94	V-0	V-0	0.0625 in
	V-0	V-0	0.125 in
Oxygen Index	36 %	36 %	ISO 4589-2

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