

## Styron CALIBRE® IM 401 11 Polycarbonate, Impact Modified

Category : Polymer , Thermoplastic , Polycarbonate (PC) , Polycarbonate, Impact Modified

### Material Notes:

CALIBRE® IM401 series resins are impact modified, UL listed polycarbonate resins which contain mold release. CALIBRE IM401 polycarbonate resins exhibit an excellent balance of impact strength and heat resistance. CALIBRE IM401 polycarbonate resins are typically used in applications requiring enhanced impact strength, such as automotive instrument panel components and retainers. Available Melt Flow Rates: 11, 18. Data provided by Dow Chemical. 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-IM-401-11-Polycarbonate-Impact-Modified.php](http://www.lookpolymers.com/polymer_Styron-CALIBRE-IM-401-11-Polycarbonate-Impact-Modified.php)

Physical Properties	Metric	English	Comments
Density	1.18 g/cc	0.0426 lb/in <sup>3</sup>	ASTM Data
Melt Density	1.02 g/cc	0.0368 lb/in <sup>3</sup>	Melt density
Linear Mold Shrinkage	0.0060 cm/cm	0.0060 in/in	
Melt Flow	11 g/10 min @Load 1.20 kg, Temperature 300 °C	11 g/10 min @Load 2.65 lb, Temperature 572 °F	ASTM Data

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	55.8 MPa	8090 psi	ASTM Data
Elongation at Break	130 %	130 %	ASTM Data
Elongation at Yield	6.0 %	6.0 %	ISO Data
Tensile Modulus	2.20 GPa	319 ksi	ISO Data.
Izod Impact, Notched	6.94 J/cm	13.0 ft-lb/in	ASTM Data
	5.34 J/cm @Temperature -50.0 °C	10.0 ft-lb/in @Temperature -58.0 °F	ASTM Data
Charpy Impact Unnotched	NB	NB	ISO Data
	NB	NB	ISO Data, Low Temp
Charpy Impact, Notched	4.00 J/cm <sup>2</sup>	19.0 ft-lb/in <sup>2</sup>	ISO Data, Low Temp
	7.00 J/cm <sup>2</sup>	33.3 ft-lb/in <sup>2</sup>	ISO Data
Impact Test	56.5 J @Temperature 23.0	41.7 ft-lb	Instrumented Dart Total Energy

Mechanical Properties	<sup>°C</sup> Metric	@Temperature 73.4 <sup>°F</sup> English	Comments
Thermal Properties	Metric	English	Comments
Specific Heat Capacity	1.76 J/g- <sup>°C</sup>	0.421 BTU/lb- <sup>°F</sup>	
Thermal Conductivity	0.191 W/m-K	1.33 BTU-in/hr-ft <sup>2</sup> - <sup>°F</sup>	
Deflection Temperature at 1.8 MPa (264 psi)	121 <sup>°C</sup>	250 <sup>°F</sup>	Unannealed; 136 <sup>°C</sup> (277 <sup>°F</sup> ) annealed; ASTM Data
Vicat Softening Point	146 <sup>°C</sup>	295 <sup>°F</sup>	

## Contact Songhan Plastic Technology Co.,Ltd.

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