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## TOUGH & FLEXIBLE

Spartech Polycast EX-Cell™ Modified Cell-Cast Acrylic sheet is more flexible and forgiving than standard acrylic sheet. It has been designed for reduced chipping during routing and fabrication and maintains the ability to relieve stress points during drilling, tapping and cutting. This enhanced pliability means a more fabrication-friendly acrylic sheet, reduced cracking and extended in-service durability.

Spartech Polycast's EX-Cell™, an enhanced cell cast acrylic material, is well suited for the marine industry. The material's formability, machinability, ductability and ease of processing make it a logical material choice for boat hatches and doors, as well as many other applications.

### Average Values for Spartech Polycast EX-Cell™ Modified Acrylic Sheet

Property	Units	Test Method	Spartech Polycast EX-Cell™	Standard Acrylic
<i>Specific Gravity</i>		ASTM D 792	1.15	1.19
<i>Tensile Strength</i>	PSI	ASTM D 638	8,000	10,000
• Elongation	%	ASTM D 638	Approx. 15%	3%-5%
<i>Tensile Modulus of Elasticity</i>	PSI	ASTM D 638	350,000	450,000
<i>Flexural Strength, Rupture</i>	PSI	ASTM D 790	13,000	15,000
• Flex Modulus of Elasticity	PSI	ASTM D 790	350,000	450,000
<i>Compressive Strength</i>				
• Compressive Yield Strength	PSI	ASTM D 695	12,500	15,630
• Compressive Modulus of Elasticity	PSI	ASTM D 695	246,000	289,700
<i>Impact Strength</i>				
• Izod, notched	Ft.-Lb./Inch	ASTM D 256	0.4	0.3
• Izod, un-notched	Ft.-Lb./Inch	ASTM D 256	7.4	4.4
<i>Rockwell Hardness</i>		ASTM D 785	81	100
<i>Barcol Hardness</i>		ASTM D 2583	30-35	50
<i>Residual Shrinkage/Internal Strain</i>	%	ASTM D 4802	1.6	2.1
<i>HDT</i>	Degrees F	ASTM D 648	185	221
<i>Coefficient of Linear Thermal Expansion</i>	Inch/Inch/Degrees F	68 to 158 Degrees F	0.00005	0.00004
<i>Water Absorption</i>	%	ASTM D 570, 24 hr.	0.10	.25
<i>Burn Rate</i>	Inch/Minute	ASTM D 635	1.5	1.4

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