

MARINE SOLUTIONS

Piedmont Plastics® is your primary source for marine solutions. Complete all of your projects from block out panels to bulkheads with our industry-leading line of substrates and accessories. Piedmont carries a comprehensive assortment of the best brands and breadth of products to service your plastic needs. With over 45 years of industry experience, Piedmont is a leading supplier of plastic sheet, rod, tube, and film throughout North America.

PMG® AQUAGLAS®

Piedmont Marine Grade[®] AquaGlas[®] is an impact modified acrylic sheet manufactured specifically for the semi-rigid marine enclosure market. AquaGlas[®] offers excellent clarity, dimensional stability, and superior weathering performance for high-end enclosures.





AQUAGLAS® VS POLYCARBONATE

FEATURE/BENEFIT	AQUAGLAS®	POLYCARBONATE
Weatherability	Excellent weatherability with no impact reduction	Yellows when exposed to sunlight, lessens impact strength after exposure
Forming	Better melt strength	Low melt strength
Forming Temperature	Wide Range (275°F - 375°F)	Distinct forming temperature
Optical Clarity	Very clear	Less clear, hazy, shows distortion
Cost	40% less than polycarbonate	Higher cost



Technical Properties

Standard Sheet Sizes

.080" x 51" x 100" .080" x 60" x 120"

PROPERTY	UNITS	TEST	VALUE RANGE				
		METHOD	-	30%	50%	70%	100%
OPTICAL							
Light Transmittance	%	ASTM D1003	92	92	92	90	90
Percent Haze	%	ASTM D1003	2	2	2	<3	<3
MECHANICAL							
Izod Impact Strength	ft.lbs./in.	ASTM D256	0.4	0.6	92	90	90
Tensile Modulus of Elasticity	psi	ASTM D638	490,000	376,000	340,000	304,000	250,000
Tensile Strength @ Yield	psi	ASTM D696	11,030	9,000	8,000	7,100	5,600
Flexural Strength @ Yield	psi	ASTM D790	17,000	13,690	12,000	10,610	8,300
Rockwell Hardness Method A		ASTM D785	95	78	68	59	46
THERMAL							
Deflection Temperature (264 psi)	°F	ASTM D648	203	198	1.94	190	185
Coefficient of Thermal Expansion	in/(in-°F)	ASTM D696	3x10 ⁻⁵	3.5x10⁻⁵	4x10 ⁻⁵	4.5x10 ⁻⁵	5x10⁵
Self Ignition Temperature	°F	ASTM D1929	833	>850	>850	>850	>850
Burning Rate	in./min.	ASTM D635	1.019	0.85	1.25	1.53	1.97
Smoke Density Rating	%	ASTM D2843	3.4	5.2	8.5	11.5	16.5
PROCESSING							
Density - Specific Gravity	% wt. gai	ASTM D792	1.19	1.18	1.17	1.16	1.15
Moisture - Water Absorption	mils./in.	ASTM D570	0.4	0.3	0.3	0.3	0.3
Dimensional - Molding Shrinkage		ASTM D955	2-6	3-6	3-6	3-6	3-6



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