



PROFESSIONAL PLASTICS

Semilon A90 & X90 Typical Properties

PROPERTY	TEST METHOD	Semilon A90	Semilon X90
Physical			
Density	ASTM D792	1.48	1.47
Water Absorption, 24 hrs	ASTM D570	0.20	0.20
Mechanical			
Tensile Strength (psi)	ASTM D638	7,300	6,400
Tensile Elongation at Break (%)	ASTM D638	18	25
Flexural Strength (psi)	ASTM D790	10,000	9,000
Flexural Modulus (ksi)	ASTM D790	3.2	2.9
Compressive Strength (psi)	ASTM D695	13,000	12,000
Hardness, Shore D	ASTM D785	80	78
Izod Impact, Notched (ft-lbs/in)	ASTM D256	1.2	0.9
Tribological			
Coefficient of Friction, Dynamic (Dry vs. Steel)	ASTM D3702	.26	.29
Wear Factor @ 73°F (in ³ min/ft lb hr) 10 ⁻¹⁰	ASTM D3702	67 x 10 ⁻¹⁰	9 x 10 ⁻¹⁰
Limiting PV (psi-fpm)	ASTM D3702	5,000	5,000
Thermal			
Coefficient of Linear Thermal Expansion (°F)	ASTM D696	5.2 x 10 ⁻⁵	5.2 x 10 ⁻⁵
Heat Deflection Temp at 264 psi (°F)	ASTM D648	230	230
Max Operating Temp (°F)	-	180	180

*Typical values only. Actual properties of individual batches will vary within specification limits.

All statements, technical information and recommendations contained in this database are presented in good faith, based upon tests believed to be reliable and practical field experience. The reader is cautioned, however, that Professional Plastics, Inc. cannot guarantee the accuracy or completeness of this information, and it is the customer's sole responsibility to determine the suitability of any product in their specific application.

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