



Product Information

ESC-Ion™ Compound PA101-BK Nylon 6/6, Heat Stabilized, Internally Lubricated

Property	Test Method	Units	PA101-BK Value
Tensile Strength	ASTM D638	PSI	12,000
Tensile Elongation	ASTM D638	%	>10
Tensile Modulus	ASTM D638	PSI	400,000
Flexural Strength	ASTM D790	PSI	15,000
Flexural Modulus	ASTM D790	PSI	400,000
Compressive Strength	ASTM D695	PSI	9,500*
Impact Strength			
Notched 1/8"	ASTM D256	ft-lbs/in.	17.7
Unnotched 1/8"	ASTM D256	ft-lbs/in.	No Break
Hardness, Rockwell	ASTM D785	R	120
Specific Gravity	ASTM D792		1.14
Water Absorption 24 hrs. @ 73 F (23 C)	ASTM D570	%	1.20
Coefficient of Friction (Dynamic)			0.28
Coefficient of Friction (Static)			
Deflection Temperature			
@264 psi (1.8 Mpa)	ASTM D648	°F	175
@66 psi (0.45Mpa)	ASTM D648	°F	410
Coefficient of Linear Thermal Expansion	ASTM D696	in/in/F	0.000072
Shelf Life			10 years
Service Temperature Range		Degrees F	-40F to + 230F
Color			BLACK

* Estimated by the Laboratory

The information provided in this data sheet corresponds to our knowledge on the subject at the date of this publication. This information may be subject to revision as new knowledge and experience becomes available. The data provided fall within the normal range of product properties and relate only to the specific material designated; these data may not be valid for such materials used in combination with any other material, additives or pigments or in any process, unless expressly indicated otherwise. The data provided should not be used to establish specifications limits or used alone as the basis of design; they are not intended to substitute for any testing you may need to do to determine the suitability of a specific compound for your particular purpose. Since Engineered Seals, LLC cannot anticipate all variation in actual end-use conditions ESC makes no warranties and assumes no liability in connection with any use of this information. Caution: Do not use this product in medical application involving permanent implantation in the human body. We highly recommend testing in your specific application, this is a guide only

