Technical Data Sheet

SUSTAMID® 6G - ASTM (PA 6G / Cast Nylon)

Product characteristics

- Good toughness
- Very good sliding properties
- Very high abrasion resistance

Product applications

- Mechanical engineering
- Materials handling industry
- Construction industry

	Test method	Unit	Guideline Value
General properties			
Density	ASTM D792	g / cm^3	1.14
Water Absorption	ASTM D570	%	8.5
Water Absorption 24 hours	ASTM D570	%	1.0
Mechanical properties			
Hardness	ASTM D2240	Shore D	78
Tensile Strength at yield 73°F	ASTM D638	psi	12000
Tensile Modulus	ASTM D638	psi	550000
Elongation at Break	ASTM D638	%	25
Flexural Strength	ASTM D790	psi	15000
Flexural Modulus	ASTM D790	psi	420000
Compressive Strength	ASTM D695	psi	15500
Rockwell Hardness	ASTM D785	M	85
Rockwell Hardness	ASTM D785	R	115
Shear Strength	ASTM D732	psi	10500
Izod Impact, Notched	ASTM D256	ft-lb/in	0.6
Coefficient of Friction, Dynamic			0.22
Thermal properties			
Thermal Conductivity		in/hr/ft^2 /°F	1.7
Coefficient of Linear Thermal Expansion	ASTM D696	in/in/°F x10^{-5}	4.5
Melting Point		°F	450
Melting Point	ASTM D3418	°F	450
Continuous Service Temperature, Air		°F	200
Deflection Temperature at 1.8Mpa (264psi)	ASTM D648	°F	195
Deflection Temperature at 1.8Mpa (66psi)	ASTM D648	°F	370
Flammability, UL94		1/8 inch	HB
Electrical properties			
Dielectric constant	ASTM D150	1 MHz	3.8
Dielectric strength	ASTM D149	V/mil	500
Surface resistivity	ASTM D257	Ω/cm	>10^{13}
Compliance Properties			
FDA			Yes
NSF			No
USDA			Yes

The data stated above are average values ascertained by statistical tests on a regular basis. The data above are provided purely for information and shall not be regarded as binding unless expressly agreed in a contract of sale.

Röchling Engineering Plastics
903 Gastonia Technology Parkway, Dallas, NC 28034, USA - Tel.:704 922 7814 – info@roechling-plastics.us – www.roechling-plastics.us
Date: 11/06/2018 Version: 1.0.0