Technical Data Sheet

Sustamid® 6G - ASTM

PA 6 G

Typical characteristics

- Good sliding properties
- Self-lubricating
- Low "stick-slip" effect

Typical industries

- Mechanical Engineering Industry
- Conveyor Technology & Automation

	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
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		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

	Test method	Unit	Guideline value
Continuous Service Temperature, Air		°F	200
Flammability, UL94		1/8 inch	HB
Deflection Temperature at 264psi	ASTM D648	°F	195
Deflection Temperature at 66psi	ASTM D648	°F	370
Electrical properties			
Dielectric constant	ASTM D150	1MHz	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.