

### Technical Data Sheet

# Sustamid<sup>®</sup> 6G MO (Cast Nylon MoS2 Filled) - ASTM

PA 6 G

#### Typical characteristics

- High rigidity
- High toughness even at high temperatures
- UV-resistant

#### Typical industries

- Mechanical Engineering Industry
- Oil and Gas

	Test method	Unit	Guideline value
<b>General properties</b>			
Density	ASTM D792	g / cm <sup>3</sup>	1.15
Water Absorption	ASTM D570	%	7.0
Water Absorption 24 hours	ASTM D570	%	0.7
<b>Mechanical properties</b>			
Hardness	ASTM D2240	Shore D	80
Tensile Strength at yield 73°F	ASTM D638	psi	12500
Tensile Modulus	ASTM D638	psi	460000
Elongation at Break	ASTM D638	%	35
Flexural Strength	ASTM D790	psi	16000
Flexural Modulus	ASTM D790	psi	450000
Compressive Strength	ASTM D695	psi	13000
Rockwell Hardness	ASTM D785		80
Rockwell Hardness	ASTM D785	R	117
Shear Strength	ASTM D732	psi	11000
Izod Impact, Notched	ASTM D256	ft-lb/in	0.6
Coefficient of Friction, Dynamic			0.22
<b>Thermal properties</b>			
Thermal Conductivity		in/hr/ft <sup>2</sup> /°F	1.7
Coefficient of Linear Thermal Expansion	ASTM D696	in/in/°F x10 <sup>-5</sup>	4.0
Melting Point		°F	430
Continuous Service Temperature, Air		°F	200

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	Test method	Unit	Guideline value
Flammability, UL94		1/8 inch	HB
Deflection Temperature at 264psi	ASTM D648	°F	200
Deflection Temperature at 66psi	ASTM D648	°F	370
<b>Electrical properties</b>			
Dielectric constant	ASTM D150	1MHz	3.8
Dielectric strength	ASTM D149	V/mil	410
Surface resistivity	ASTM D257	Ω/cm	>10 <sup>12</sup>
<b>Compliance properties</b>			
FDA			No
NSF			No
USDA			No

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.

