

Technical Data Sheet

Sustamid[®] 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 |
|---|-------------|----------------------------|-----------------|
| General properties | | | |
| Density | ASTM D792 | g / cm ³ | 1.15 |
| Water Absorption | ASTM D570 | % | 7.0 |
| Water Absorption 24 hours | ASTM D570 | % | 0.7 |
| Mechanical properties | | | |
| 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 |
| Thermal properties | | | |
| Thermal Conductivity | | in/hr/ft ² /°F | 1.7 |
| Coefficient of Linear Thermal Expansion | ASTM D696 | in/in/°F x10 ⁻⁵ | 4.0 |
| Melting Point | | °F | 430 |
| Continuous Service Temperature, Air | | °F | 200 |

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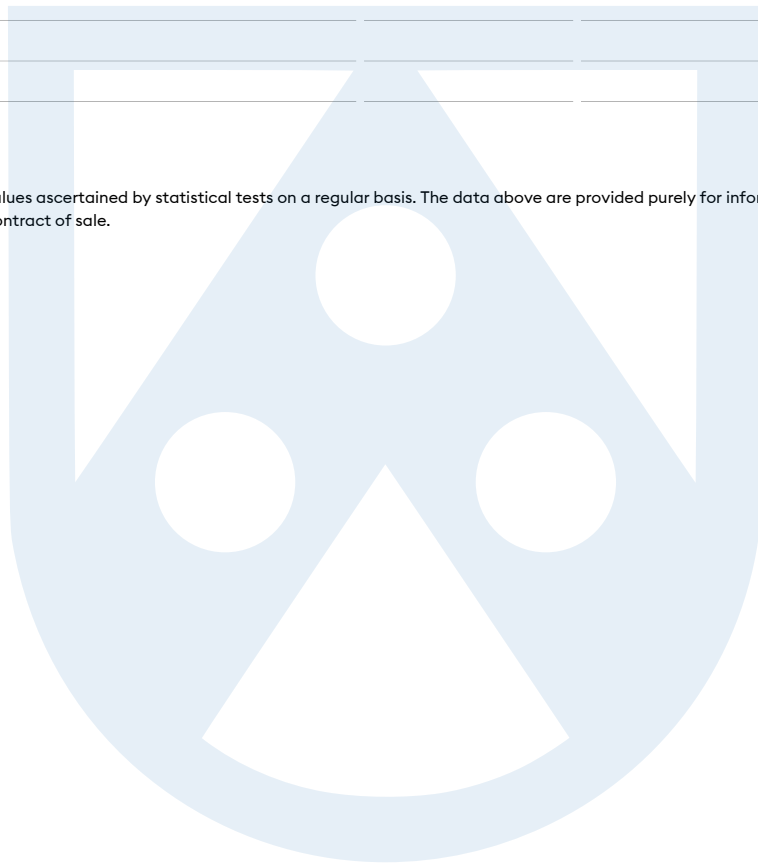
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| | Test method | Unit | Guideline value |
|----------------------------------|-------------|----------|-------------------|
| Flammability, UL94 | | 1/8 inch | HB |
| Deflection Temperature at 264psi | ASTM D648 | °F | 200 |
| Deflection Temperature at 66psi | ASTM D648 | °F | 370 |
| Electrical properties | | | |
| Dielectric constant | ASTM D150 | 1MHz | 3.8 |
| Dielectric strength | ASTM D149 | V/mil | 410 |
| Surface resistivity | ASTM D257 | Ω/cm | >10 ¹² |
| Compliance properties | | | |
| 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.



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