

Technical Data Sheet

SUSTAPEEK[®] ASTM

[PEEK]

Product characteristics

- Excellent dimensional stability
- Flame retardant and self-extinguishing
- Very low smoke density

Product applications

- Medical engineering
- Aviation industry
- Electrical industry

| | Test method | Unit | Guideline Value |
|---|-------------|----------------------------|------------------|
| General properties | | | |
| Density | ASTM D792 | g / cm ³ | 1.32 |
| Water Absorption 24 hours | ASTM D570 | % | 0.1 |
| Dissipation Factor | ASTM D150 | 1MHz | 0.003 |
| Water Absorption Saturation | ASTM D570 | % | 0.5 |
| Mechanical properties | | | |
| Hardness | ASTM D2240 | Shore D | 85 |
| Tensile Strength at yield 73°F | ASTM D638 | psi | 16000 |
| Tensile Modulus | ASTM D638 | psi | 500000 |
| Elongation at Break | ASTM D638 | % | 20 |
| Flexural Strength | ASTM D790 | psi | 25000 |
| Flexural Modulus | ASTM D790 | psi | 600000 |
| Compressive Strength | ASTM D695 | psi | 18000 |
| Rockwell Hardness | ASTM D785 | M | 105 |
| Rockwell Hardness | ASTM D785 | R | 126 |
| Shear Strength | ASTM D732 | psi | 7700 |
| Izod Impact, Notched | ASTM D256 | ft-lb/in | 1.2 |
| Coefficient of Friction, Dynamic | | | 0.4 |
| Thermal properties | | | |
| Thermal Conductivity | | in/hr/ft ² /°F | 1.73 |
| Coefficient of Linear Thermal Expansion | ASTM D696 | in/in/°F x10 ⁻⁵ | 2.6 |
| Melting Point | ASTM D789 | °F | 630 |
| Continuous Service Temperature, Air | | °F | 480 |
| Deflection Temperature at 1.8Mpa (264psi) | ASTM D648 | °F | 320 |
| Deflection Temperature at 1.8Mpa (66psi) | ASTM D648 | °F | 360 |
| Flammability, UL94 | | 1/8 inch | V-0 |
| Electrical properties | | | |
| Dielectric constant | ASTM D150 | 1 MHz | 3.3 |
| Dielectric strength | ASTM D149 | V/mil | 480 |
| 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.



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