

Technical Data Sheet

SustaPEI MG (ULTEM™ HU1000) - ASTM

Typical industries

- Healthcare
- Pharma

	Test method	Unit	Guideline value
General properties			
Density	ASTM D792	g / cm ³	1.27
Water Absorption 24 hours	ASTM D570	%	0.25
Water Absorption Saturation	ASTM D570	%	1.25
Mechanical properties			
Hardness	ASTM D2240	Shore D	86
Tensile Strength at yield 73°F	ASTM D638	psi	16700
Tensile Modulus	ASTM D638	psi	480000
Elongation at Break	ASTM D638	%	80
Flexural Strength	ASTM D790	psi	20000
Flexural Modulus	ASTM D790	psi	500000
Rockwell Hardness	ASTM D785		114
Rockwell Hardness	ASTM D785	R	123
Izod Impact, Notched	ASTM D256	ft-lb/in	0.6
Coefficient of Friction, Dynamic			0.2
Thermal properties			
Thermal Conductivity		in/hr/ft ² /°F	1
Coefficient of Linear Thermal Expansion	ASTM D696	in/in/°F x10 ⁻⁵	3.1
Melting Point	ASTM D789	°F	460
Continuous Service Temperature, Air		°F	340
Deflection Temperature at 1.8Mpa (264psi)	ASTM D648	°F	395
Deflection Temperature at 1.8Mpa (66psi)	ASTM D648	°F	405
Electrical properties			
Dielectric constant	ASTM D150	1MHz	3.2



	Test method	Unit	Guideline value
Dielectric strength	ASTM D149	V/mil	830
Surface resistivity	ASTM D257	Ohm/cm	10 ¹⁶
Compliance properties			
FDA	ASTM 210 CER117.1595		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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