

Technical Data Sheet

Sustadur[®] PET - ASTM

PET

Typical characteristics

- Low moisture absorption
- Good creep properties
- Good sliding properties
- High tensile strength
- High stiffness
- Good machinability
- Low coefficient of thermal expansion
- Good dimensional stability
- Good wear resistance

Typical industries

- Conveyor Technology & Automation
- Mechanical Engineering Industry
- Electronics
- Vehicle Construction
- Food Industry
- Bakery and Confectionery
- Beverage Industry
- Semiconductor Front-End Wet Bench
- Semiconductor CMP

	Test method	Unit	Guideline value
General properties			
Density	ASTM D792	g / cm ³	1.41
Water Absorption 24 hours	ASTM D570	%	0.07
Dissipation Factor	ASTM D150	1MHz	0.02
Water Absorption Saturation	ASTM D570	%	0.7
Mechanical properties			
Hardness	ASTM D2240	Shore D	87
Tensile Strength at yield 73°F	ASTM D638	psi	12000
Tensile Modulus	ASTM D638	psi	460000
Elongation at Break	ASTM D638	%	30
Flexural Strength	ASTM D790	psi	17000
Flexural Modulus	ASTM D790	psi	480000
Compressive Strength	ASTM D695	psi	15000
Rockwell Hardness	ASTM D785		93
Rockwell Hardness	ASTM D785	R	125
Shear Strength	ASTM D732	psi	8000

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	Test method	Unit	Guideline value
Izod Impact, Notched	ASTM D256	ft-lb/in	0.5
Coefficient of Friction, Dynamic			0.2
Thermal properties			
Thermal Conductivity		in/hr/ft ² /°F	1.8
Coefficient of Linear Thermal Expansion	ASTM D696	in/in/°F x10 ⁻⁵	3.3
Melting Point	ASTM D789	°F	490
Continuous Service Temperature, Air		°F	230
Deflection Temperature at 1.8Mpa (264psi)	ASTM D648	°F	240
Deflection Temperature at 1.8Mpa (66psi)	ASTM D648	°F	338
Flammability, UL94		1/8 inch	HB
Electrical properties			
Dielectric constant	ASTM D150	1MHz	3.1
Dielectric strength	ASTM D149	V/mil	385
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.

