



High Impact Polystyrene Data Sheet

		Units	ASTM Test Method	HI-Impact Extruded Polystyrene
MECHANICAL	Strength to Weight Ratio	ksi	-	3.8
	Specific Gravity @73 F	-	D792	1.04
	Tensile Strength @73 F, (ult)/(yld)	psi	D638	4000 (ult)
	Tensile Modulus of Elasticity @ 73 F	psi	D638	-
	Tensile Elongation at Break @ 73 F	%	D638	50
	Flexural Strength @ 73 F	psi	D790	-
	Flexural Modulus of Elasticity @ 73 F	psi	D790	26000
	Shear Strength @ 73 F	psi	D732	-
	Compressive Strength, (% Deformation) @73 F	psi	D695	-
	Izod Impact, (Notched) @73 F	ft-lb/in of notch	D256 TypeA	-
	Coefficient of Friction, (Dry vs. Steel) Dynamic	-	-	-
	Limiting PV, (with 4 to 1 factor of safety applied)	psi-ft/min	-	-
	THERMAL	Coefficient of Linear Thermal Expansion @73 F	in/in/F	E-831 (TMA)
Heat Deflection Temperature @ 264 psi		F	D648	183
Tg-Glass transition temperature, (Amorphous)		F	D3418	-
Melting Point, (VS=Vicat Softening Temp.)		F	D3418	-
Continuous Service Temperature in Air, (Max.)		F	-	-
Thermal Conductivity		BTU-in/hr-ft ² -F	-	-
ELECTRICAL	Dielectric Strength, Short Term	Volts/mil	D149	-
	Volume Resistivity	ohm-cm	D257	-
	Dielectric Constant @ 10E6 Hz	-	D150	-
	Dissipation Factor @ 10E6 Hz	-	D150	-
	Flammability @ 3.1 mm unless noted	-	UL94	-
H₂O	Water Absorption, Immersion, 24 Hrs	% by wt.	D570(7)	-
	Water Absorption, Saturation	% by wt.	D570(7)	-

