



**TYPICAL PROPERTIES OF
1000 SERIES CLEAR POLYSTYRENE**

GENERAL	ASTM TEST METHOD	VALUE
Thickness Range	————	0.0012” to 0.00225”
Area Factor	————	26,300 sq. in / lb. / mil
Water Absorption (By Weight)	————	0.05% 24 hrs.
FDA Approved Grades	————	Yes
Light Transmission	D1003	92%
Aging Properties Indoors	————	Excellent
Outdoors	————	Limited
Specific Gravity	D1505	1.05g/cc
WVTR, g/100 in. ² 24 hrs. @ 100°F, 95% RH	————	6.0 / mil

MECHANICAL PROPERTIES	ASTM TEST METHOD	VALUE
Tensile Strength	D882	8,000-12,000 PSI
Elongation	D882	3-40%
Modules of Elasticity	D882	420,000 - 450,000 PSI
Hardness (Rockwell M)	D785	85
Tear Strength	D1004	1.1 lbs. / mil

THERMAL PROPERTIES	ASTM TEST METHOD	VALUE
Continuous Heat Resistance	————	170°F
Flammability	————	Slow Burning
Thermal Conductivity	C177	2.0 x 10 ⁴ cal/see/cm ² /c°/cm
Thermal Expansion	D696	6.8 x 10 in/in/c°
Heat Sealing Range	————	250° - 350° F

CHEMICAL RESISTANCE	ASTM TEST METHOD	VALUE
Acids	D543	Excellent
Strong Acids	D543	Attacked by Oxidizing Acids
Weak Alkalies	D543	Excellent
Strong Alkalies	D543	Excellent
Organic Solvent	D543	Soluble in Aromatic or Chlorinated Hydrocarbons
Alcohols	D543	Good
Tar, Grease & Oil	D543	Good
BARRIER PROPERTIES		
		VALUE
Water Vapor		Fair to Good
Gas		Fair to Good

The data herein represent typical values by the methods indicated and should be so considered.

Since processing variables are a major factor in product performance, this information should serve only as a guide. To the best of our knowledge, the data is correct. No warranty is made or is to be implied. The Corporation assumes no obligation or liability for use of data presented.