

Celplast MH

Property ^a	Test Method ^b	Typical Value, Units ^c
Plasticizer		27%
Specific Gravity	D 792	1.28
Mechanical Properties		
Tensile Stress @ Yield	D 638	33.1 MPa (5400 psi)
Tensile Stress @ Break	D 638	36.5 MPa (5900 psi)
Elongation @ Break	D 638	25%
Flexural Modulus	D 790	2137 MPa (3.4 x 10 ⁵ psi)
Flexural Yield Strength	D 790	54.5 MPa (9100 psi)
Rockwell Hardness, R Scale	D 785	82
Izod Impact Strength, Notched		
@ 23°C (73°F)	D 256	187 J/m (3.5 ft.lbf/in.)
@ -40°C (-40°F)	D 256	48 J/m (0.9 ft.lbf/in.)
Thermal Properties		
Deflection Temperature^d		
@ 1.82 MPa (264 psi)	D 648	73°C (163°F)
@ 0.455 MPa (66 psi)	D 648	83°C (181°F)
Vicat Softening Temperature ^d	D 1525	109°C (228°F)
Permanence Properties		
Water Absorption, 24 h immersion	D 570	2.3%
Soluble Matter Loss	D 570	0.3%
Weight Loss on Heating [72 hours @ 80°C (176°F)]	D 706	1.8%
Miscellaneous Acetate Properties		
Specific Heat @ 23°C (73°F)	DSC	1.26-1.67 kJ/kg.K (0.301-0.399 Btu/lb.°F)
Thermal Conductivity	C 177	0.17-0.33 W/m.K (1.2-2.3 Btu.in./h.ft ² .°F)
Coefficient of Linear Thermal Expansion	D 696	11-17 x 10 ⁻⁵ /°C (mm/mm°C) (6-9 x 10 ⁻⁵ /°F (in./in.°F))
Mold Shrinkage	D 955	0.2-0.6%
Dielectric Strength	D 149	11.8-18.7 kV/mm (300-475 V/mil)