

Accura[®] HPC

A high-speed, high-rigidity engineered nanocomposite

High Performance Composite

Post-Cured Material

MEASUREMENT	CONDITION	METRIC	U.S.
Tensile Strength (MPa PSI)	ASTM D638	66-89	9570-12910
Tensile Modulus (MPa KSI)	ASTM D638	9000-9700	1305-1407
Elongation at Break	ASTM D638	0.8-1.9 %	0.8-1.9 %
Flexural Strength (MPa PSI)	ASTM D790	137-157	19870-22770
Flexural Modulus (MPa KSI)	ASTM D790	8700-10200	1262-1479
Izod impact notched (J/m ft-lbs/in)	ASTM D256	14-17	0.3
Heat Deflection Temperature	ASTM D 648		
UV Postcure only	@ 66 PSI	73 °C	63 °F
UV Postcure only	@ 264 PSI	62 °C	144 °F
UV + Thermal Postcure (120°C)	@ 66 PSI	250 °C	482 °F
UV + Thermal Postcure (120°C)	@ 264 PSI	87 °C	189 °F
Poissons Ratio	ASTM D638	~0.32	~0.32
Coefficient of Thermal Expansion	ASTM E 831-93		
50-100 °C (ppm/°K ppm/°F)		64.2	35.7
100-150 °C (ppm/°K ppm/°F)		81.7	45.4
Dielectric Constant at 1MHz	ASTM D150	4.2	4.2
Solid Density (g/cm ³ lbs/in ³)		1.61	0.058
Shore D		80	

Liquid Material

MEASUREMENT	CONDITION	
Viscosity	@ 30 °C (86 °F)	1000 cps
Penetration Depth (Dp)		5.0 mils
Critical Exposure (Ec)		5.9 mJ/cm ²
Color		White
Liquid Density		1.60 g/cm ³

Features

- Produces extremely strong and rigid parts
- High-production speeds
- Smooth easy-to-finish surfaces
- High temperature resistance
- Lowest viscosity

Applications

- Automotive and aerospace wind tunnel models
- Abrasion-resistant structures
- Jigs, fixtures and tooling applications
- Electrically insulating enclosures



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