



# Accura<sup>®</sup> HPC High Performance Composite

A high-speed, high-rigidity engineered nanocomposite

## 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 @ 66 PSI @ 264 PSI	73 °C 62 °C	163 °F 144 °F
Poissons Ratio	ASTM D638	-0.32	-0.32
Coefficient of Thermal Expansion, 50-100 °C (ppm/°K   ppm/°F)	ASTM E 831-93	64.2	35.7
Coefficient of Thermal Expansion, 100-150 °C (ppm/°K   ppm/°F)	ASTM E 831-93	81.7	45.4
Dielectric Constant at 1MHz	ASTM D150	4.2	4.2
Solid Density (g/cm <sup>3</sup>   lbs/in <sup>3</sup> )		1.61	0.058
Shore D		80	

## Liquid Material

MEASUREMENT	CONDITION	
Viscosity	@ 30 °C (86 °F)	700-1000 cps
Penetration Depth (Dp)		5.0 mils
Critical Exposure (Ec)		5.9 mJ/cm <sup>2</sup>
Color		White
Liquid Density		1.60 g/cm <sup>3</sup>

## 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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