



**LEHIGH VALLEY  
PLASTICS**

We Shape The Industry

# CIP Composites™

## CIP152

### Benefits:

- Self lubricating
- Low coefficient of friction
- High edge and shock load capabilities
- Low thermal expansion
- Suited for fresh or salt water environments
- Negligible water swell

Physical Properties		
Compressive Strength (ASTM D695)		
Ultimate	51,000 PSI	351 MPa
Yield	15,000 PSI	103 MPa
Parallel	13,500 PSI	93 MPa
Modulus	500,000 PSI	3,447 MPa
Tensile Strength (ASTM D638)	12,000 PSI	82 MPa
Tensile Modulus of Elasticity (ASTM D638)	510,000 PSI	3,500 MPa
Poisson's Ratio (ASTM D3039-08)	0.231	
Shear Strength (ASTM D2344)	12,000 PSI	82 MPa
Flexural Modulus of Elasticity (ASTM D790)	260,000 PSI	1,793 MPa
Hardness Rockwell M (ASTM D785)	100	
Density (ASTM D792)	0.047 lbs/in <sup>3</sup>	1.3 g/cm <sup>3</sup>
Water Swell (ASTM D570)	<0.15%	
Mechanical Properties		
Coefficient of Friction - Dry Dynamic	0.10-0.15	
Electrical Properties		
Dielectric Strength (ASTM D149-97a)	200 volts/mil	
Volume Resistivity (ASTM D257-07)	4.2 x 10 <sup>15</sup> ohm-cm	
Thermal Properties		
Operating Temperatures	-40° to 200° F	-40° to 93° C
Coefficient of Thermal Expansion	68° to 200° F	20° to 93° C
Normal to Laminate	3.5x10 <sup>-5</sup> /Δ° F	6.3x10 <sup>-5</sup> /Δ° C
Parallel to Laminate	1.8x10 <sup>-5</sup> /Δ° F	3.24x10 <sup>-5</sup> /Δ° C

\*CIP Composites do not contain asbestos \*\*Properties based on sheet material

IMPORTANT: The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained therefrom. Lehigh Valley Plastics, Inc. will not be held responsible for the use of this information relative to actual application.