

# NP193P

## TECHNICAL DATA BULLETIN

**GRADE:** NP193P

**NEMA GRADE:** ---

**U. L. LISTED:** N

**DESCRIPTION:** 17 oz. aramid and "soft glass" fibers are combined to make a fabric that is stronger than pure aramid and less abrasive than glass fabrics. This material is impregnated with a high temperature phenolic resin matrix, which produces a composite with excellent mechanical strength at elevated temperatures and adverse environments. Applications include wear plates for conveyor systems, valve plates, and compressor and pump vanes. Variations of this material may be developed for specific applications.

**THICKNESS TESTED:** 0.125", 0.250" & 0.500"

### TYPICAL PROPERTIES

GENERAL PHYSICAL PROPERTIES	UNITS	VALUE
Specific Gravity	-	1.65
Moisture Absorption (.125")	%	1.70
Flexural Strength (.125") LW	psi	45,000
CW		20,000
Hot Flexural Strength (.125") LW	psi	33,000
CW		15,000
Flexural Modulus (.125") LW	kpsi	1,200
CW		1,200
Tensile Strength (.125") LW	psi	23,000
CW		19,000
Izod Impact Strength E-48/50 (.500") LW	ft-lb/in	32.0
CW	notched	9.0
Compressive Strength - flatwise (.500")	psi	39,000
Bond Strength (.500")	lb	2,400

<b>THERMAL &amp; ELECTRICAL PROPERTIES</b>	<b>UNITS</b>	<b>VALUE</b>
Maximum Operating Temperature	°C	200
Coefficient of Thermal Expansion X-axis (.125") Y-axis	" / °C x 10 <sup>-6</sup>	21.0 30.8
Breakdown Voltage Condition A (.125") D-48/50	kV	60 4
Permittivity (0.125") Condition D-24/23	-	5.00
Dissipation Factor (0.125") Condition D-24/23	-	0.030
Short Time Heat Resistance <sup>2</sup>	°C	300

<sup>1</sup> NEMA LI-6: This temperature is a recommendation only, and based upon experience in various applications. The maximum operating temperature is dependent upon the application and should be investigated prior to use.

This data, while believed to be accurate and based on reliable analytical methods, is for informational purposes only. The terms and conditions of the agreement under which it is sold will govern any sales of this product. Data supplied above are "typical values"; not to be considered "specification values".