



THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

N180 High-Strength Rods

NEMA Grade GPO-1

N180 High-Strength Rods are high tensile and shear strength glass fiber reinforced composite rods that offer excellent temperature resistance up to 350°F. N180 rods are excellent for pinning mule shoe and other frac plug components where extra reinforcement is required.

The Gund Company custom fabricates insulation materials to the exact specifications and drawings specified by our customers. We offer our customers the proper product for their specific application. A variety of dimensions and diameter sizes are available. Product colors vary according to material type.

ASTM				
PROPERTIES		Test Method	Units (SI)	Typical Values
PHYSICAL	Standard Color			Black
	Density	ASTM D792	lbs/in ³	0.069
	Water Absorption	ASTM D570	%	0.150
THERMAL	Glass Transition Temperature, T _g	DMA	°F	356
MECHANICAL	Compressive Strength: Axial	ASTM D695	PSI	60,000
	Compressive Strength: Transverse	ASTM D695	PSI	15,000
	Tensile Strength	ASTM D638	PSI	80,000
	Pin Shear Strength	ASTM D7617	PSI	30,000

ROD SIZE AVAILABILITY

STANDARD LENGTH

- 10 Feet
- 3.048 Meters

BUNDLE QUANTITY

- 400 Feet
- 122 Meters

The data supplied are typical values. They are not to be considered specification values. All of the information, suggestions, and recommendations about these properties and uses of the products herein are based on tests and data believed to be accurate; however, the final determination regarding the suitability of any material described herein for the contemplated application, the manner of such use, and whether the use infringes any patents is the sole responsibility of the user. There is no warranty - expressed or implied - including, without limitation, warranties of merchantability or fitness for a particular purpose. Under no circumstances shall we be liable for incidental or consequential loss or damage.



THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

MARKETS



Switchgear



Electronics



Power Generators



Motor Applications



Transformers



Metals Processing



Electric Vehicles



Military/Aerospace



Oil & Gas



Medical



Space

OUR EXPERTISE IS YOUR COMPETITIVE ADVANTAGE

The Gund Company provides a wide range of material solutions from rigid, glass epoxy composites to high-temperature, silicone sponges.

We take a consultative approach to understanding your application by working with your engineers and buyers to find materials that fit the application. By understanding the most important material properties, we often find cost-reduction opportunities. Our Application Engineering Teams have decades of material experience and look forward to working with you on your upcoming project.

Material Families:

- Thermoset Rigid Laminates and Composites
- Flexible Laminates, Papers, Films, and Felts
- Thermoplastic Materials
- Elastomeric Materials

Our Manufacturing Capabilities Include:

- Compression Molding
- Pultrusion
- Filament & Convoluted Wound Tube
- Infusion & B-Stage Composites Lay-up and Molding
- Injection Molding
- Extrusion of Thermoplastics

Our Engineering Capabilities Include:

- Custom Material Development
- Resin Formulation
- Laboratory Testing
- Comparative Materials Evaluation



THE GUND COMPANY GLOBAL FOOTPRINT – LOCAL SERVICE

