



THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

TEFLON®

Item:	Teflon® (PTFE)	
Description:	Polytetrafluoroethylene, commonly referred to as PTFE, Teflon®, and even FEP, is a synthetic fluoropolymer of tetrafluoroethylene suitable for many applications. The Gund Company can machine several available grades of Teflon® to extremely close tolerances. Leveraging our extensive thermoplastic expertise, we ensure the delivery of PTFE/FEP machined parts meet your exact specifications. Additionally, our PTFE/FEP products comply with Military Specification MIL-I-19161A.	
Applications:	<ul style="list-style-type: none"> • Electrical insulators • Seals • Valve plates 	
Key Characteristics:	<ul style="list-style-type: none"> • High Impact resistance • High creep resistance • Excellent dimensional stability 	
Availability:	Fabricated Parts:	The Gund Company custom fabricates insulation materials to the exact specifications and drawings specified by our customers.

Length, width, thickness, and diameter sizes are available in a wide variety, with the proper product specified for your particular application. Product colors will vary according to material type.

Typical Properties	Test Method	Teflon® unfilled	Teflon® 25% glass filled
Specific Gravity (lb./in. ³)	ASTM D792	0.078	0.081
Water Absorption, immersion 24 hours (%)	ASTM D229	<0.01	0.02
Tensile Strength (psi)	ASTM D638	3,900	2,100
Tensile Elongation at Break (%)	ASTM D638	300	270
Tensile Modulus (psi)	ASTM D638	80,000	--
Flexural Strength (psi)	ASTM D790	no break	1,950
IZOD impact, notched (ft.-lbs./in. of notch)	ASTM D256	3.5	--
Flexural Modulus (psi)	ASTM D790	72,000	190,000
Melting temperature (°F / °C)	ASTM D3418	635° / 335°	635° / 335°
Flammability Rating	UL94	V-0	V-0
Coefficient of Linear Thermal Expansion (x 10 ⁻⁵ in./in./°F)	ASTM D696	7.5	6.4
Dielectric Strength, short time, 1/8" thick (V/mil)	ASTM D149	285	--

Data supplied above are typical values and are not to be considered specification values. All of the information, suggestions and recommendations pertaining to the properties and uses of the products herein are based upon tests and data believed to be accurate; however, the final determination regarding 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 warranty of merchantability or fitness for a particular purpose. Under no circumstances shall we be liable for incidental or consequential loss or damage.



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Markets



Space



Electric Vehicles



Electric Motors



Power Generators



Transformers



Switchgear



Electronics



Military/Aerospace



Medical

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 Engineering Capabilities Include:

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

Our Manufacturing Capabilities Include:

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



The Gund Company Global Footprint – Local Service

