



# THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

## PEEK

<b>Item:</b>	PEEK (polyetheretherketone)	
<b>Description:</b>	<p>PEEK is a strong, stiff plastic material that is often used in applications where performance at elevated temperatures is required. PEEK has outstanding chemical resistance as well as resistance to steam and hot water.</p> <p><b>PEEK (Unfilled)</b> This general purpose grade is unreinforced and offers the highest elongation and toughness of all PEEK grades. Available in natural ranging from light brown - tan, &amp; black. Black PEEK is ideal for instrument components where aesthetics are important, as well as for seal components where ductility and inertness are important. All unfilled PEEK grades comply with FDA regulation 21 CFR 177 2415 for repeated food contact.</p> <p><b>PEEK (30% Glass Filled)</b> The addition of glass fibers significantly reduces the expansion rate and increases the flexural modulus of PEEK. This grade is ideal for structural applications that require improved strength, stiffness, or stability, especially at temperatures above 300°F (150°C). Glass-filled PEEK ranges from light brown to tan in color.</p>	
<b>Applications:</b>	<ul style="list-style-type: none"> <li>• Aerospace parts</li> <li>• Seals</li> <li>• Semiconductor</li> <li>• Piston parts</li> </ul>	
<b>Key Characteristics:</b>	<ul style="list-style-type: none"> <li>• Strong and stiff</li> <li>• Outstanding chemical resistance</li> <li>• FDA compliant grades available</li> <li>• Excellent wear characteristics</li> </ul>	
<b>Availability:</b>	<b>Fabricated Parts:</b>	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	PEEK Unfilled	PEEK 30% Glass Filled
Water Absorption, Immersion 24 Hours (%)	ASTM D570	0.5	0.11
Tensile Strength (psi)	ASTM D638	14,000	24,600
Flexural Modulus (psi)	ASTM D790	590,000	1,450,000
IZOD Impact, Notched (ft-lbs/in of notch)	ASTM D256	1.6	1.84
Heat Deflection Temperature @ 264 psi (°F)	ASTM D648	306	599
Maximum Continuous Service Temperature in Air (°F)	--	480	482
Coefficient of Linear Thermal Expansion (x 10 <sup>-5</sup> in./in./°F)	ASTM D696	2.6	1.2

AS9100C Certified | ISO/AS9100 Certified QMS | RoHS Compliant | ITAR Compliant

*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.*