



# THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

## PVC and CPVC

<b>Item:</b>	<b>PVC (Polyvinyl chloride) &amp; CPVC (Chlorinated polyvinyl chloride)</b>	
<b>Description:</b>	PVC is a thermoplastic made of 57% chlorine (derived from industrial grade salt) and 43% carbon (derived predominantly from oil / gas via ethylene). This chlorine gives to PVC excellent fire resistance.	
<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	PVC	CPVC
<b>Density (lb/in<sup>3</sup>) (g/cm<sup>3</sup>)</b>	ASTM D792	0.051 1.41	0.055 1.52
<b>Water Absorption, 24 hrs (%)</b>	ASTM D570	0	0.04
<b>Tensile Strength (psi)</b>	ASTM D638	7,500	8,200
<b>Tensile Modulus (psi)</b>	ASTM D638	411,000	430,000
<b>Tensile Elongation at Break (%)</b>	ASTM D638	--	27
<b>Flexural Strength (psi)</b>	ASTM D790	12,800	15,000
<b>Flexural Modulus (psi)</b>	ASTM D790	481,000	410,000
<b>Hardness</b>	ASTM D785	115 (Rockwell R)	121 (Rockwell R)
<b>IZOD Notched Impact (ft-lb/in)</b>	ASTM D256	1	1.6
<b>Coefficient of Linear Thermal Expansion (x 10<sup>-5</sup> in./in./°F)</b>	ASTM D696	6.1	3.7
<b>Heat Deflection Temp @ 264 psi (°F / °C)</b>	ASTM D648	176 / 80	217 / 103
<b>Melting Temp (°F / °C)</b>	ASTM D3418	n.a.	n.a.
<b>Max Operating Temp (°F / °C)</b>	--	140 / 60	200 / 93
<b>Thermal Conductivity (BTU-in/ft<sup>2</sup>-hr-°F) (x 10<sup>-4</sup> cal/cm-sec-°C)</b>	C177	0.9 3.1	0.95 3.3
<b>Flammability Rating</b>	UL 94	V-O	V-O
<b>Dielectric Strength (V/mil) short time, 1/8" thick</b>	ASTM D149	544	1250
<b>Dielectric Constant at 60 Hz</b>	ASTM D150	3.2	3.7
<b>Dissipation Factor at 60 Hz</b>	ASTM D150	0.0096	--
<b>Volume Resistivity (ohm-cm) at 50% RH</b>	ASTM D257	5.4 x 10 <sup>15</sup>	3.4 x 10 <sup>15</sup>

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.*