



THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

PVC and CPVC

PVC (Polyvinyl chloride) & CPVC (Chlorinated polyvinyl chloride)

PVC is a thermoplastic. The composition is 57% chlorine (derived from industrial-grade salt) and 43% carbon (derived predominantly from oil/gas via ethylene). Chlorine gives PVC excellent fire resistance.

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.

PROPERTIES	ASTM*		TYPICAL VALUES		
	Test Method	Units	PVC	CPVC	
PHYSICAL	Density	ASTM D792	lb/in ³	0.0510	1.47
	Water Absorption	ASTM D570	%	0.06	0.03
	Cell Class	ASTM D1784		12454-B	23446
	Chemical Resistance	ASTM D1784		Class B	
THERMAL	Vicat Softening Point	ASTM D1525	°F	181	
	Heat Deflection Temperature (66 PSI)	ASTM D648	°F	179	--
	Heat Deflection Temperature (264 PSI)	ASTM D648	°F	176	194
	Coefficient of Linear Thermal Expansion	ASTM D696	µin/in-°F	32.0	39.0
	Flame Spread Index	ASTM E84		20	--
	Flammability	UL 94V		0.0	--
	Flammability	ASTM D635		Self extinguishing	--
	Thermal Conductivity	ASTM C177	BTU	--	0.95
	Vertical Burn Test	UL 94		--	V-0
	Limiting Oxygen Index	ASTM D2863	%	--	58 - 62
Fire Resistance (per NSF Standards)	ASTM D635	in/min	--	Did not burn	
MECHANICAL	Tensile Modulus	ASTM D638	KSI	411	390
	Tensile Strength, Yield	ASTM D790	PSI	7,500	7,300
	Flexural Modulus	ASTM D790	KSI	481	382
	Flexural Strength, Yield	ASTM D790	PSI	12,800	12,700
	IZOD Impact Strength	ASTM D256	ft-lb/in	1.00	10.00
	Rockwell R Hardness	ASTM D785		115	117
	Shore Hardness D	ASTM D224		89	85
	Compressive Modulus	ASTM D695			156.3
ELECTRICAL	Volume Resistivity	ASTM D257	Ohm-cm	5.4*10 ¹⁵	3.4*10 ¹⁵
	Dielectric Constant @ 60 Hz	ASTM D150		3.90	3.70
	Dissipation Factor @ 60 Hz	ASTM D150		0.0096	
	Loss Index @ 60 Hz	ASTM D150		0.03	
	Dielectric Strength (Perp. in Oil)	ASTM D149	V/mil	544	
	Dielectric Strength	ASTM D147			1250
	Power Factor @ 100 Hz	ASTM D150	%		0.01

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.