



# THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

## E210 Molded Components for Electric Vehicle Battery Applications

<b>Item:</b>	<b>E210 Molded Components for Electric Vehicle Battery Applications</b>
<b>Description:</b>	E210 is a high-strength glass-reinforced molding compound designed for electric vehicle battery applications. Its high strength-to-weight ratio and flexural modulus make it an ideal material option for structural or support applications. E210 also has natural electrical insulating properties making it suitable for supporting live electrical components. The material is compression molded into custom shapes, commonly including threaded metallic inserts for mechanical connections and improved mechanical strength.
<b>Applications:</b>	E210 is a suitable material for battery enclosures, frames, holders, brackets, and end plates.

Key Characteristics	Test Method	Units - English (SI)	Typical Values
Standard Color*	--	--	Black*
Glass Content	--	%	50%**
Density	--	lb/in (g/cc) <sup>3</sup>	0.066 (1.83)
Water Absorption (0.125")	ASTM D570	%	0.25
Tensile Strength	ASTM D638	psi (MPa)	14,000 (97)
Compressive Strength, Flat-Wise	ASTM D695	psi (MPa)	20,000 (138)
Flexural Strength	ASTM D790	psi (MPa)	59,000 (407)
Flexural Modulus	ASTM D790	ksi	4,100
IZOD Impact Strength, Edge-Wise	ASTM D256	ft-lbs/in	14
Shear Strength	ASTM D732	psi (MPa)	18,000 (124)
Glass Transition Temperature	DMA Method	°F (°C)	320 (160)

\* Custom colors available upon request

\*\* Custom formulation available to meet application requirements

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.