



# THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

## SMC Molded Insulators

<b>Item:</b>	<b>SMC Molded Insulators</b>
<b>Description:</b>	<p>Sheet Molding Compound (SMC) is a polymeric composite material made of a mixture of unsaturated polymer resin, processing additives, cross linked catalyst, shrink control polyester, mold release agent, fire retardant agent, color pigments, inorganic fillers, and glass chops. It's strong mechanical and electrical insulating properties make it an ideal material for supporting bus bars or other live electrical components.</p> <p>The material is compression molded into a variety of shapes which commonly include threaded metallic inserts for mechanical connections and improved mechanical strength.</p>

Material Properties (DMC)	Test Method	Values	PLC	Units
Specific Gravity	ASTM D792	1.7		--
Glass Contents	--	25		%
Water Absorption (24 hours)	ASTM D570	0.20		%
Tensile Strength	ASTM D638	700		Kgf/cm <sup>2</sup>
Flexural Strength	ASTM D790	1,550		Kgf/cm <sup>2</sup>
Izod Impact Strength	ASTM D256	600		J/m
Compressive Strength	ASTM D695	1,800		Kgf/cm <sup>2</sup>
Dielectric Strength	ASTM D149	12		kV/mm
Comparative Tracking Index	IEC 60112	> 600	0	V
Dry Arc Resistance	ASTM D495	> 180		Seconds
Flammability Index	UL 94	V-0		--
Glow Wire Ignition Temp (Thickness > 3mm)	IEC-60695-2-13	960		°C
Hot Wire Ignition Test	ASTM D3874	> 120	0	Seconds
Relative Temperature Index Mechanical Strength (Thickness - 3mm)	UL 746B	130		°C
Relative Temperature Index Electrical Strength (Thickness - 3mm)	UL 746B	105		°C
High Voltage Arc Tracking Rate	UL 746A	< 10	0	mm/min
High Current Arc Ignition	UL 746A	> 120	0	mean # of arcs
Material Group	IEC 60601	1		--
Pollution Degree	IEC 60950	3		--
Insulation Class	as per NEMA	B		--
Working Temp	--	-40 - 135		°C

AS9100 Certified QMS | ISO9001 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.