



Expect design performance with Meldin® materials -- products that are available in custom molded and machined components and stock shapes for machining. They retain their critical properties over a temperature range from cryogenic through +600°F (315°C) for continuous operation and may be used intermittently up to +900°F (482°C). Superior strength and rigidity, combined with self-lubricating properties, provide long maintenance-free service for the most demanding bearing and structural applications.

Meldin® 2000 series can be direct formed economically into various configurations, using a compression molding technique similar to powdered metal technology. It can also be finish-machined from basic shapes to near tolerance parts. Meldin® is produced by Furon from polyimide resin.

\*\* MELDIN® is the registered trademark of

## SAINT-GOBAIN

GENERAL PROPERTIES	ASTM or UL Test	MELDIN® 2001 Typical Values	MELDIN® 2021 Typical Values
<b>MECHANICAL @ RT 73°F ( 23°C )</b>			
Tensile Strength (psi)	D638	13,500	11,000
Elongation (%)	D638	8	5
Flexural Strength (psi)	D790	21,000	12,500
Flexural Modulus (psi x 10 <sup>5</sup> )	D790	6.5	5.75
Compressive Stress @ 1% Strain (psi)	D695	40,000	33,000
Compressive Stress @ 10% Strain (psi)	D695	34,000	30,000
Compressive Modulus (psi x 10 <sup>5</sup> )	D695	4	4
<b>THERMAL</b>			
Coeff.of Thermal Expansion 23–260°C (73–500°F)x(10 <sup>-5</sup> n./in./°F)	E831	2.95	2.7
Thermal Conductivity (BTU in/hr ft <sup>2</sup> °F)	F433	3	4.3
<b>ELECTRICAL</b>			
Dielectric Strength, short time (.08" ) thick (V/mil)	D149	400	200
Dielectric Constant 100 Hz*	D150	3.4	12.65
Dielectric Constant 10 KHz*	D150	3.39	12.41
Dielectric Constant 1 MHz*	D150	3.35	11.92
Specific Gravity	D792	1.39	1.48
Hardness Shore D	D785	92	90
Water Absorption, 24 Hours* (%)	D570	0.13*	0.13*
Outgassing (%CVCM)	E595	0.01	0
<b>MECHANICAL @ 500 °F ( 260 °C )</b>			
Tensile Strength (psi)	D638	7,000	5,600
Elongation (%)	D638	7	3.5
Compressive Strength (psi)	D695 Mod	29,500	14,500
Compressive Modulus (psi x 10 <sup>5</sup> )	D695 Mod	1.75	1.9
<b>MECHANICAL @ 600 °F ( 316 °C )</b>			
Tensile Strength (psi)	D638	3,000	2,000
Elongation (%)	D638	25	12
Compressive Strength (psi)	D695 Mod	25,000	8,500
Compressive Modulus (psi x 10 <sup>5</sup> )	D695 Mod	1	0.75

NOTE: The information contained here in is typical values intended for reference only. They should NOT be used as a basis for design specifications or quality control.