

## Typical Properties of MELDIN® 7000

PROPERTY	TEST METHOD	ENGLISH (METRIC)	MELDIN® 7001	MELDIN® 7021
<b>MECHANICAL @ RT</b>				
Tensile Strength	ASTM D638	psi (MPa)	10,500 (72.4)	9,100 (63)
Elongation	ASTM D638	%	8.0	5.5
Flexural Strength	ASTM D790	psi (MPa)	12,800 (88)	13,000 (89.5)
Flexural Modulus	ASTM D790	psi x 10 <sup>5</sup> (GPa)	3.65 (2.5)	4.5 (3.1)
Compressive Stress @ 1% Strain	ASTM D695	psi (MPa)	3,800 (26)*	3,400 (23)
Compressive Stress @ 10% Strain	ASTM D695	psi (MPa)	18,500 (127.5)*	15,300 (106)
Compressive Modulus	ASTM D695	psi x 10 <sup>5</sup> (GPa)	4.0 (2.8)*	3.0 (2.1)
Coefficient of Thermal Expansion 73-500 °F (23-260°C)	ASTM E831	In/in/°F (m/m/°C) x 10 <sup>5</sup>	2.7 (4.86)	2.5 (4.5)
Thermal Conductivity	ASTM F433	BTU in/hr ft <sup>2</sup> °F (W/m°C)	2.15 (0.31)	-
<b>ELECTRICAL</b>				
Dielectric Strength Short time 2 mm (.08") thick	ASTM D149	V/mil (MV/m)	580 (22.9)	280 (11)*
Dielectric Constant 100 Hz*	ASTM D150	-	3.18	-
Dielectric Constant 10 kHz*	ASTM D150	-	3.16	-
Dielectric Constant 1 MHz*	ASTM D150	-	3.14	-
<b>OTHER</b>				
Specific Gravity	ASTM D792	-	1.34	1.42
Hardness Rockwell E*	ASTM D785	-	45-55*	36
Water Absorption, 24 hours*	ASTM D570	%	0.23*	0.19*
Water Absorption, 48 hours*	ASTM D570	%	0.6*	0.50*
Coefficient of Friction @ 25000 PV=250 psi x 200 fpm	ASTM D3702	-	0.25	0.23
Coefficient of Friction @ 100000 PV=500 psi x 200 fpm	ASTM D3702	-	0.27	0.12
High Temperature Dimensional Stability @ 500 °F (260 °C)	INTERNAL	% Change	-	0.04% Max
<b>Mechanical @ 500 °F (260°C)</b>				
Tensile Strength	ASTM D638	psi (MPa)	5,500 (38)	4,700 (32)
Elongation	ASTM D638	%	7.5	5.2
Flexural Strength	ASTM D790	psi (MPa)	7000 (48)	7,500 (52)
Flexural Modulus	ASTM D790	psi x 10 <sup>5</sup> (GPa)	2.0 (1.3)	2.64 (1.8)

Data Obtained from Direct formed samples, except as noted

\* Meldin Compression molded sample