

PPMeldin® 7022

Meldin® 7022 is 40% by weight graphite filled polyimide. It is similar to the 7021 for wear and friction, but it has the best overall dimensional stability (thermally), and the 7022 has the lowest coefficient of thermal expansion – due to the relatively high graphite filler content

Property	Test Method	Units	Meldin® 7022
Mechanical			
Tensile Strength	ASTM D638	psi	8,000
Elongation	ASTM D638	%	3.0
Flexural Strength	ASTM D790	psi	13,000
Flexural Modulus	ASTM D790	psi	754,000
Compressive Stress @ 1% Strain	ASTM D695	psi	4,700
Compressive Stress @ 10% Strain	ASTM D695	psi	15,500
Compressive Modulus	ASTM D695	psi	479,000
Coefficient of Thermal Expansion 73°F to 500°F	ASTM E831	in/in/°F	1.4 x 10 ⁻⁵
Thermal Conductivity	ASTM F433	BTU-in/hr-ft ² -°F	-
Electrical			
Dielectric Strength, .08"	ASTM D149	V/mil	-
Dielectric Constant			
100 Hz	ASTM D150		-
10 KHz	ASTM D150		-
1 MHz	ASTM D150		-
Surface Resistivity	ASTM D257	ohm/square	-
Other			
Specific Gravity	ASTM D792		1.65
Hardness, Rockwell E	ASTM D785		5 - 20
Water Absorption, 24 hrs	ASTM D570	%	0.25
Water Absorption, 48 hrs	ASTM D570	%	0.48
Deformation Under Load, 2000 psi	ASTM D621	%	-
Limiting Oxygen Index	ASTM D2863		-
Mechanical Properties @ 500 °F			
Tensile Strength	ASTM D638	psi	4,500
Elongation	ASTM D638	%	2.4
Flexural Strength	ASTM D790	psi	7,000
Flexural Modulus	ASTM D790	psi	5,200,000
Specification Qualification			
ASTM D-6456-99		Satisfies	Type II Class 2P
SAE AMS 3644E		Satisfies	Class 3 Form P
MIL-R-46198		Satisfies	Type II Class 2P

Values in this table are for compression-molded material.

NOTE: The information contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. Contact us for manufacturers' complete material property datasheets. All values at 73°F (23°C) unless otherwise noted.