

Meldin® 7211

Meldin® 7211 is 15% by weight graphite and 10% by weight PTFE fillers. It has the lowest coefficient of friction of all the Meldin® 7000 grades. However, above 300 °F, the typical material used is Meldin® 7021, which has a very similar coefficient of friction to 7211 at temperatures above 300 °F, and the wear factor of 7021 is lower than 7211 at temperatures above °F

Property	Test Method	Units	Meldin® 7211
Mechanical			
Tensile Strength	ASTM D638	psi	7,500
Elongation	ASTM D638	%	4.0
Flexural Strength	ASTM D790	psi	11,800
Flexural Modulus	ASTM D790	psi	493,000
Compressive Stress @ 1% Strain	ASTM D695	psi	3,500
Compressive Stress @ 10% Strain	ASTM D695	psi	14,950
Compressive Modulus	ASTM D695	psi	348,000
Coefficient of Thermal Expansion 73°F to 500°F	ASTM E831	in/in/°F	2.4 x 10 ⁻⁵
Thermal Conductivity	ASTM F433	BTU-in/hr-ft ² -°F	5.2
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		1.53
Hardness, Rockwell E	ASTM D785		1 - 15
Water Absorption, 24 hrs	ASTM D570	%	0.23
Water Absorption, 48 hrs	ASTM D570	%	0.46
Deformation Under Load, 2000 psi	ASTM D621	%	-
Limiting Oxygen Index	ASTM D2863		-
Mechanical Properties @ 500 °F			
Tensile Strength	ASTM D638	psi	4,300
Elongation	ASTM D638	%	2.8
Flexural Strength	ASTM D790	psi	6,000
Flexural Modulus	ASTM D790	psi	3,000,000
Specification Qualification			
ASTM D-6456-99		Satisfies	Type II Class 3P
SAE AMS 3644E		Satisfies	Class 4 Form P
MIL-R-46198		Satisfies	Type II Class 3P

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. All values at 73°F (23°C) unless otherwise noted.