

MATERIAL DATASHEET

Meldin® 4310

- Features & Benefits:**
- Black color, excellent tribological properties, very good impact resistance
 - Recommended for seal rings and washers
 - Working Temperature Range: from cryogenic to +270°C [+518°F]

Properties	Test Methods	Typical Values	Units
PHYSICAL			
Specific Gravity	ASTM D792	1.46	-
Water Absorption-RT, 24hr	ASTM D570	0.28	%
MECHANICAL			
Tensile Strength – RT / 235°C [455°F]	ASTM D638	113 [16,400] / 75 [10,900]	MPa [psi]
Elongation - RT	ASTM D638	3.3	%
Tensile Modulus - RT	ASTM D638	6.8 [9.9]	GPa [psi x 10 ⁵]
Compressive Strength – RT / 235°C [455°F]	ASTM D695	170 [24,700] / NA	MPa [psi]
Compressive Modulus - RT	ASTM D695	5.3 [7.7]	GPa [psi x 10 ⁵]
Flexural Strength – RT / 235°C [455°F]	ASTM D790	215 [31,200] / 113 [16,400]	MPa [psi]
Flexural Modulus - RT	ASTM D790	6.9 [10]	GPa [psi x 10 ⁵]
THERMAL			
Melting point	ASTM D3418	371 [700]	°C [°F]
Glass Transition Temperature	ASTM D3418	280 [536]	°C [°F]
Linear Coefficient of Thermal Expansion along flow, <T _g / >T _g	ASTM E831	2.5 [1.4] / NA	m/m/°C [in/in/°F] x 10 ⁻⁵
Thermal conductivity	ASTM F433	0.5 [3.9]	W/m·°C [BTU·in/hr·ft ² ·°F]
Heat deflection temperature	ASTM D648	279 [534]	°C [°F]
ELECTRICAL			
Dielectric Strength	ASTM D149	NA	kV/mm [V/mil]
Dielectric Constant - RT - 1kHz	ASTM D150	6	-
Volume Resistivity - RT	ASTM D257	8 x 10 ¹⁵	Ohm cm
GENERAL			
Resin Matrix	-	PAI	-
Reinforcing Materials	-	Graphite / PTFE	-

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