

MATERIAL DATASHEET

Meldin® 4210

Features: Dark Brown, low coefficient of friction and good wear resistance in lubricated environments, high impact resistance

Benefits: Very good fatigue resistance, recommended for seal rings and thrust washers

Working Temperature Range: from cryogenic to +270°C [+518°F]

Properties	Test Methods	Typical Values	Units
PHYSICAL			
Specific Gravity	ASTM D792	1.43	--
Water Absorption-RT, 24hr	ASTM D570	0.24	%
MECHANICAL			
Tensile Strength – RT / 235°C	ASTM D638	114 [16,500] / 53 [7,700]	MPa [psi]
Elongation-RT	ASTM D638	4.8	%
Tensile Modulus-RT	ASTM D638	3.8 [5.5]	GPa [p s i x 10 ⁵]
Compressive Strength – RT / 235°C	ASTM D695	133 [19,300] / 64 [9,300]	MPa [psi]
Compressive Modulus-RT	ASTM D695	3.5 [5.1]	GPa [p s i x 10 ⁵]
Flexural strength – RT / 235°C	ASTM D790	147 [21,300] / 71 [10,300]	MPa [psi]
Flexural Modulus-RT	ASTM D790	4.2 [6.1]	GPa [p s i x 10 ⁵]
THERMAL			
Melting point	ASTM D3418	--	°C [°F]
Glass Transition Temperature	ASTM D3418	280 [536]	°C [°F]
Linear Coefficient of Thermal Expansion along flow, <T _g / >T _g	ASTM E831	NA	m/m/°C [in/in/°F] x 10 ⁻⁵
Linear Coefficient of Thermal Expansion average, <T _g / >T _g	ASTM E831	NA	m/m/°C [in/in/°F] x 10 ⁻⁵
Thermal conductivity	ASTM F433	NA	GPa [p s i x 10 ⁵]
Heat deflection temperature	ASTM D648	NA	°C [°F]
ELECTRICAL			
Dielectric Strength (2.5 mm thick)	ASTM D149	NA	kV/m [V/mil]
Dielectric Constant-RT, 1kHz)	ASTM D150	NA	-
Volume Resistivity-RT	ASTM D257	NA	Ohm cm

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