

# MATERIAL DATASHEET

## Meldin® 4310

**Features:** Black, Excellent tribological properties, Recommended for seal rings and washers

**Benefits:** Very good impact resistance

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

Properties	Test Methods	Typical Values	Units
<b>PHYSICAL</b>			
Specific Gravity	ASTM D792	1.46	--
Water Absorption-RT, 24hr	ASTM D570	0.28	%
<b>MECHANICAL</b>			
Tensile Strength – RT / 235°C	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 [p s i x 10 <sup>5</sup> ]
Compressive Strength – RT / 235°C	ASTM D695	170 [24,700] / NA	MPa [psi]
Compressive Modulus-RT	ASTM D695	5.3 / [7.7]	GPa [p s i x 10 <sup>5</sup> ]
Flexural strength – RT / 235°C	ASTM D790	215 [31,200] /113 [16,400]	MPa [psi]
Flexural Modulus-RT	ASTM D790	6.9 / [10]	GPa [p s i x 10 <sup>5</sup> ]
<b>THERMAL</b>			
Melting point	ASTM D3418	371 [700]	°C [°F]
Glass Transition Temperature	ASTM D3418	280 [536]	°C [°F]
Linear Coefficient of Thermal Expansion along flow, <Tg / >Tg	ASTM E831	2.5 [1.4] / NA	m/m/°C [in/in/°F] x 10 <sup>-5</sup>
Linear Coefficient of Thermal Expansion average, <Tg / > Tg	ASTM E831	NA	m/m/°C [in/in/°F] x 10 <sup>-5</sup>
Thermal conductivity	ASTM F433	0.5 [3.9]	GPa [p s i x 10 <sup>5</sup> ]
Heat deflection temperature	ASTM D648	279 [534]	°C [°F]
<b>ELECTRICAL</b>			
Dielectric Strength (2.5 mm thick)	ASTM D149	NA	kV/m [V/mil]
Dielectric Constant-RT, 1kHz)	ASTM D150	6	-
Volume Resistivity-RT	ASTM D257	8 x 10 <sup>15</sup>	Ohm cm

The table above represents typical values, intended for reference only. They should NOT be used as a basis for design specifications or quality control.

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