

MATERIAL DATASHEET

Meldin[®] 5302

Features: Black, High modulus material with high temperature resistance, Very good chemical resistance

Benefits: Recommended for back-up rings

Working Temperature Range:
-80° to +300°C [-112° to +572°F]

Properties	Test Methods	Typical Values	Units
PHYSICAL			
Specific Gravity	ASTM D792	1.31	--
Water Absorption, 24hr	ASTM D570	NA	%
MECHANICAL			
Tensile Strength-Break RT/ Yield RT	ASTM D638	117 [17,000] / 117 [17,000]	MPa [psi]
Elongation-RT	ASTM D638	20	%
Tensile Modulus-RT	ASTM D638	4.4 [6.4]	GPa [psi x 10 ⁵]
Compressive Strength – RT / 200°C	ASTM D695	NA/NA	MPa [psi]
Compressive Modulus-RT	ASTM D695	3.5 [5.1]	GPa [psi x 10 ⁵]
Flexural strength – RT / 249°C	ASTM D790	182 [26,400]/NA	MPa [psi]
Flexural Modulus-RT	ASTM D790	4.6 [6.7]	GPa [psi x 10 ⁵]
THERMAL			
Melting point	ASTM D3418	375 [707]	°C [°F]
Glass Transition Temperature	ASTM D3418	160 [320]	°C [°F]
Linear Coefficient of Thermal Expansion along flow, <Tg / >Tg	ASTM E831	5 [2.8]/NA	m/m/°C [in/in/°F] x 10 ⁻⁵
Linear Coefficient of Thermal Expansion average, <Tg / > Tg	ASTM E831	6 [3.4]/NA	m/m/°C [in/in/°F] x 10 ⁻⁵
Thermal conductivity	ASTM F433	NA	GPa [psi 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

The table above represents typical values, intended for reference only. They should NOT be used as a basis for design specifications or quality control. Meldin[®] is a registered trademark.
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