

Envalior Akulon® F160-Z

Very High Viscosity, Lubricated
Former DSM Engineering Plastics product line is now with Envalior.

Physical Properties	Metric	English	Comments
Density	1.13 g/cc	0.0408 lb/in ³	dry; ISO 1183
Water Absorption	9.5 %	9.5 %	Sim. To ISO 62
Moisture Absorption	2.50 %	2.50 %	Sim. To ISO 62
Viscosity Number	450 cm ³ /g	4.50 dl/g	ISO 307, 1157, 1628

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	85.0 MPa	12300 psi	dry; ISO 527-1/-2
Elongation at Break	>= 50 %	>= 50 %	dry; ISO 527-1/-2
Elongation at Yield	4.0 %	4.0 %	dry; ISO 527-1/-2
Tensile Modulus	3.20 GPa	464 ksi	dry; ISO 527-1/-2

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+15 ohm-cm	1.00e+15 ohm-cm	dry; IEC 60093
Surface Resistance	1.00e+15 ohm	1.00e+15 ohm	cond; IEC 60093
Dielectric Constant	3.1 @Frequency 1e+6 Hz	3.1 @Frequency 1e+6 Hz	dry; IEC 60250
	3.4 @Frequency 100 Hz	3.4 @Frequency 100 Hz	dry; IEC 60250
Dielectric Strength	25.0 kV/mm	635 kV/in	dry; IEC 60243-1
Dissipation Factor	0.0065 @Frequency 100 Hz	0.0065 @Frequency 100 Hz	dry; IEC 60250
	0.0165 @Frequency 1e+6 Hz	0.0165 @Frequency 1e+6 Hz	dry; IEC 60250

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	100 µm/m-°C	55.6 µin/in-°F	ISO 11359-1/-2
Melting Point	220 °C	428 °F	10°C/min; ISO 11357-1/-3