SALES PLASTICS.COM
Website: salesplastics.com
Email: jerry@salesplastics.com
Phone: +86 18657312116

Polyplastics DURACON® M25-44

Categories:Polymer; Thermoplastic; Acetal (Polyoxymethylene, POM); Acetal Copolymer, Unreinforced
Material Notes:Standard, high viscosity grade.

Physical Properties	Metric	English	Comments
Density	1.41 g/cc	0.0509 lb/in³	ISO 1183
Water Absorption	0.50 % @Temperature 23.0 °C, Time 86400 sec	0.50 % @Temperature 73.4 °F, Time 24.0 hour	1 mm thickness; ISO 62
Linear Mold Shrinkage, Flow	0.027 cm/cm @Thickness 2.00 mm	0.027 in/in @Thickness 0.0787 in	Cavity pressure 60 MPa; 60x60x2; ISO 294-4
Linear Mold Shrinkage, Transverse	0.023 cm/cm @Thickness 2.00 mm	0.023 in/in @Thickness 0.0787 in	Cavity pressure 60 Mpa; 60x60x2; ISO 294-4
Melt Flow	2.5 g/10 min @Load 2.16 kg, Temperature 190 °C	2.5 g/10 min @Load 4.76 lb, Temperature 374 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	80	80	ISO 2039-2
Tensile Strength	59.0 MPa	8560 psi	ISO 527-1,2
Elongation at Break	40 %	40 %	Nominal; ISO 527-1,2
Tensile Modulus	2.50 GPa	363 ksi	ISO 527-1,2
Flexural Strength	81.0 MPa	11700 psi	ISO 178
Flexural Modulus	2.35 GPa	341 ksi	ISO 178
Charpy Impact, Notched	0.800 J/cm²	3.81 ft-lb/in²	ISO 179/1eA
Coefficient of Friction, Dynamic	0.37 @Pressure 0.0600 MPa	0.37 @Pressure 8.70 psi	Thrust, vs M90-44, 15 cm/s; JIS K7218
	0.40 @Pressure 0.980 MPa	0.40 @Pressure 142 psi	Thrust, vs c-steel, 30 cm/s; JIS K7218

Website: salesplastics.com
Email: jerry@salesplastics.com
Phone: +86 18657312116

K (wear) Factor	<= 1.00 x 10^{-8} mm³/N-M @Pressure 0.980 MPa	<= 0.496 x 10^{-10} in³-min/ft-lb-hr @Pressure 142 psi	Thrust, vs C-steel, steel side, 30 cm/s; JIS K7218
	30.0 x 10^{-8} mm³/N-M @Pressure 0.980 MPa	14.9 x 10^{-10} in³-min/ft-lb-hr @Pressure 142 psi	Thrust, vs C-steel, material side, 30 cm/s; JIS K7218

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+14 ohm-cm	1.00e+14 ohm-cm	IEC 60093
Surface Resistance	1.00e+16 ohm	1.00e+16 ohm	IEC 60093
Dielectric Strength	19.0 kV/mm @Thickness 3.00 mm	483 kV/in @Thickness 0.118 in	IEC 60243-1

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	120 µm/m-°C @Temperature 23.0 - 55.0 °C	66.7 µin/in-°F @Temperature 73.4 - 131 °F	
CTE, linear, Transverse to Flow	120 µm/m-°C @Temperature 23.0 - 55.0 °C	66.7 µin/in-°F @Temperature 73.4 - 131 °F	
Deflection Temperature at 1.8 MPa (264 psi)	90.0 °C	194 °F	ISO 75-1,2
Flammability, UL94	HB	HB	

Descriptive Properties	
Yellow Card File No.	E45034