

Polyplastics DURACON[®] M270-44

Polyplastics DURACON[®] M270- 44 is a polyoxymethylene (POM) copolymer renowned for its low viscosity and high flow characteristics.

Physical property		Standard	Value	Unit
Density		ISO 1183	1.41	g/cm ³
Shrinkage	Flow 60x60x2mm	ISO 294	1.9	%
Shrinkage	xFlow 60x60x2mm	ISO 294	1.9	%
Water Absorption	23°C 24hr 1.00mm	ISO 62	0.5	%
Melt Index	190°C 2.16kg	ISO 1133	27	g/10min
Melt Index	190°C 2.16kg	ISO 1133	23	cm ³ /10min
Hardness		Standard	Value	Unit
Rockwell	Hardness M(Scale)	ISO 2039	80	
Mechanical behavior		Standard	Value	Unit
Tensile Modulus		ISO 527	2800	MPa
Tensile Strength		ISO 527	63	MPa
Elongation	Break	ISO 527	30	%
Flexural Strength		ISO 178	88	MPa
Flexural Modulus		ISO 178	2500	MPa
Charpy Notch Impact	23°C	ISO 179	5.3	kJ/m ²
Friction Coefficient	Dynamic VS C- Steel 0.98MPa 0.3m/s thrust	JIS K7218	0.40	
Friction Coefficient	Dynamic VS M90- 44 0.06MPa 0.15m/s thrust	JIS K7218	0.37	mm ³ /(N · km)
Specific Wear Rate	VS C-Steel 0.3m/s 0.98MPa Material Side thrust	JIS K7218	0.00003	mm ³ /(N · km)
Specific Wear Rate	VS C- Steel 0.3m/s 0.98MPa Steel Side thrust	JIS K7218	0.0001	mm ³ /(N · km)