DURACON® PM09S01N

Polyplastics - *Acetal (POM) Copolymer*

General Information

Product Description			
Medical			
Standard			
General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Biocompatible	• Copolymer	• Wear Resistant
Uses	• Medical/Healthcare Applications		
Agency Ratings	• DMF • EU 10/2011	• FDA 21 CFR 177.2470 • ISO 10993	• MAF • USP Class VI
Part Marking Code (ISO 11469)	• >POM<		

Properties [1]

Physical	**Nominal Value**	**Unit**	**Test Method**
Density	1.41	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	9.0	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	8.0	cm³/10min	ISO 1133
Water Absorption (24 hr, 73°F, 0.0394 in)	0.50	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	392000	psi	ISO 527-1
Tensile Stress	9570	psi	ISO 527-2
Nominal Tensile Strain at Break	35	%	ISO 527-2
Flexural Modulus	363000	psi	ISO 178
Flexural Stress	12800	psi	ISO 178
Coefficient of Friction [2] (Dynamic)	0.40		JIS K7218
Wear Factor			JIS K7218
140 psi, 59 ft/min [3]	< 0.50	10^-10 in³·min/ft·lb·hr	
140 psi, 59 ft/min [4]	40	10^-10 in³·min/ft·lb·hr	
8.7 psi, 30 ft/min [5]	500	10^-10 in³·min/ft·lb·hr	
8.7 psi, 30 ft/min [6]	6000	10^-10 in³·min/ft·lb·hr	
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (73°F)	4.3	ft·lb/in²	ISO 179/1eA
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (M-Scale)	86		ISO 2039-2
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	203	°F	ISO 75-2/A
CLTE - Flow (73 to 131°F)	6.7E-5	in/in/°F	Internal Method
CLTE - Transverse (73 to 131°F)	6.7E-5	in/in/°F	Internal Method
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	1.0E+16	ohms	IEC 60093
Volume Resistivity	1.0E+14	ohms·cm	IEC 60093
Electric Strength (0.118 in)	480	V/mil	IEC 60243-1
Additional Information	**Nominal Value**	**Unit**	**Test Method**
Color Number	WK2001		

[1] Typical properties: these are not to be construed as specifications.

[2] vs C-Steel, pressure 0.98MPa, 30cm/s

[3] vs C-Steel, Steel Side

[4] vs C-Steel, Material Side

[5] vs M90-44, Material Side

[6] vs M90-44, M90-44 Side