



DURACON® PM09S01N

Polyplastics - Acetal (POM) Copolymer

General Information

Product Description

Medical

Standard

General

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/cm ³	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	cm ³ /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 in ³ ·min/ft·lb·hr	
140 psi, 59 ft/min ⁴	40	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	
8.7 psi, 30 ft/min ⁵	500	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	
8.7 psi, 30 ft/min ⁶	6000	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	4.3	ft·lb/in ²	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

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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
Color Number	WK2001	

Notes

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