

DURACON® JW-03

Polyplastics - Acetal (POM) Copolymer

General Information

Product Description

High Sliding

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Features	• Copolymer • Low Friction
UL File Number	• E45034
Forms	• Pellets
Processing Method	• Injection Molding
Part Marking Code (ISO 11469)	• >POM<

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.40	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	46	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	39	cm ³ /10min	ISO 1133
Molding Shrinkage ²			ISO 294-4
Across Flow : 0.0787 in	1.9	%	
Flow : 0.0787 in	2.0	%	
Water Absorption (24 hr, 73°F, 0.0394 in)	0.60	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	377000	psi	ISO 527-1
Tensile Stress	7830	psi	ISO 527-2
Nominal Tensile Strain at Break	35	%	ISO 527-2
Flexural Modulus	348000	psi	ISO 178
Flexural Stress	11500	psi	ISO 178
Coefficient of Friction			JIS K7218
Dynamic ³	0.21		
vs. Steel - Dynamic ⁴	0.17		
Wear Factor			JIS K7218
140 psi, 59 ft/min ⁵	0.50	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	
140 psi, 59 ft/min ⁶	10	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	
8.7 psi, 30 ft/min ⁷	40	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	
8.7 psi, 30 ft/min ⁸	110	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	2.5	ft·lb/in ²	ISO 179/1eA
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	80		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	208	°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
Flammability	Nominal Value	Unit	Test Method
Flame Rating	HB		UL 94
Additional Information	Nominal Value	Unit	Test Method



Notes

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

² 60x60x20mmt, Cavity Pressure 60 MPa

³ vs M90-44, 0.06 MPa, 15 cm/s

⁴ 0.98 MPa, 30 cm/s

⁵ vs C-Steel, Steel Side

⁶ vs C-Steel, Material Side

⁷ vs M90-44, Material Side

⁸ vs M90-44, M90-44 Side

