

DURACON® WW-09

Polyplastics - Acetal (POM) Copolymer + PE

General Information

Product Description

High Sliding

High Viscosity

General

Features	• Copolymer	• High Viscosity	• Low Friction
Forms	• Pellets		
Processing Method	• Injection Molding		
Part Marking Code (ISO 11469)	• >POM+PE<		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.38	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.5	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	2.3	cm ³ /10min	ISO 1133
Molding Shrinkage ²			ISO 294-4
Across Flow : 0.0787 in	2.3	%	
Flow : 0.0787 in	2.9	%	
Water Absorption (24 hr, 73°F, 0.0394 in)	0.70	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	377000	psi	ISO 527-1
Tensile Stress	8410	psi	ISO 527-2
Nominal Tensile Strain at Break	40	%	ISO 527-2
Flexural Modulus	319000	psi	ISO 178
Flexural Stress	10900	psi	ISO 178
Coefficient of Friction			JIS K7218
Dynamic ³	0.34		
vs. Steel - Dynamic ⁴	0.16		
vs. Steel - Dynamic ⁵	0.14		
Wear Factor			JIS K7218
71 psi, 59 ft/min ⁶	< 0.50	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	
140 psi, 59 ft/min ⁶	< 0.50	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	
140 psi, 59 ft/min ⁷	13	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	
71 psi, 59 ft/min ⁷	21	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	
8.7 psi, 30 ft/min ⁸	450	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	
8.7 psi, 30 ft/min ⁹	3900	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

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Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	75		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Unannealed	181	°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+15	ohms	IEC 60093
Volume Resistivity	6.0E+14	ohms·cm	IEC 60093
Electric Strength (0.118 in)	480	V/mil	IEC 60243-1
Additional Information	Nominal Value	Unit	
Color Number	CF2001		

Notes

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

² 60x60x2mmt, Cavity Pressure 60 MPa

³ vs M90-44, 0.06MPa, 15cm/s

⁴ 0.49MPa, 30cm/s

⁵ 0.98 MPa, 30 cm/s

⁶ vs C-Steel, steel side

⁷ vs C-Steel, material side

⁸ vs M90-44, material side

⁹ vs M90-44, M90-44 side