

DURACON® WR-01

Polyplastics - Acetal (POM) Copolymer

General Information

Product Description

Special

Chlorinated Water Resistant

General

Features	• Copolymer	• Moisture Resistant
Forms	• Pellets	
Processing Method	• Injection Molding	
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)	10	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	8.0	cm ³ /10min	ISO 1133
Molding Shrinkage ²			ISO 294-4
Across Flow : 0.0787 in	2.0	%	
Flow : 0.0787 in	2.2	%	
Water Absorption (24 hr, 73°F, 0.0394 in)	1.2	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	348000	psi	ISO 527-1
Tensile Stress	8410	psi	ISO 527-2
Nominal Tensile Strain at Break	38	%	ISO 527-2
Flexural Modulus	319000	psi	ISO 178
Flexural Stress	11000	psi	ISO 178
Coefficient of Friction			JIS K7218
Dynamic ³	0.25		
vs. Steel - Dynamic ⁴	0.19		
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	9.9	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	
8.7 psi, 30 ft/min ⁷	1700	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	
8.7 psi, 30 ft/min ⁸	5000	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	2.7	ft·lb/in ²	ISO 179/1eA
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	80		ISO 2039-2

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Unannealed	172	°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	5.0E+13	ohms	IEC 60093
Volume Resistivity	1.0E+13	ohms·cm	IEC 60093
Electric Strength (0.118 in)	480	V/mil	IEC 60243-1
Additional Information	Nominal Value	Unit	
Color Number	CF2001/CD3068		

Notes

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

² 60×60×2mmt, 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, M90-44 Side

⁸ vs M90-44, Material Side