

DURACON® CH-15

Polyplastics - Acetal (POM) Copolymer

General Information

Product Description

Electric Conductive

CF15% Reinforced, Low Wear

General

Filler / Reinforcement	• Carbon Fiber, 15% Filler by Weight
Features	• Copolymer • Electrically Conductive • Wear Resistant
Forms	• Pellets
Processing Method	• Injection Molding
Part Marking Code (ISO 11469)	• >POM-CF15<

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.45	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	3.0	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	2.4	cm ³ /10min	ISO 1133
Molding Shrinkage ²			ISO 294-4
Across Flow : 0.0787 in	1.0	%	
Flow : 0.0787 in	0.60	%	
Water Absorption (24 hr, 73°F, 0.0394 in)	0.80	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.70E+6	psi	ISO 527-1
Tensile Stress	18900	psi	ISO 527-2
Tensile Strain (Break)	1.5	%	ISO 527-2
Flexural Modulus	1.45E+6	psi	ISO 178
Flexural Stress	26800	psi	ISO 178
Coefficient of Friction			JIS K7218
Dynamic ³	0.37		
vs. Steel - Dynamic ⁴	0.27		
Wear Factor			JIS K7218
71 psi, 59 ft/min ⁵	5.0	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	
8.7 psi, 30 ft/min ⁶	99	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	
71 psi, 59 ft/min ⁷	250	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)	2.1	ft·lb/in ²	ISO 179/1eA
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Unannealed	325	°F	

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Thermal	Nominal Value	Unit	Test Method
CLTE - Flow (73 to 131°F)	5.6E-6	in/in/°F	Internal Method
CLTE - Transverse (73 to 131°F)	5.0E-5	in/in/°F	Internal Method
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	3.0E+2	ohms	Internal Method
Volume Resistivity	1.0E+3	ohms·cm	Internal Method
Additional Information	Nominal Value	Unit	
Color Number	CD3501		

Notes

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

² 60x60x2mmt, Cavity Pressure 60 MPa

³ vs M90-44, 0.06 MPa, 15 cm/s

⁴ 0.49 MPa, 30 cm/s

⁵ Thrust, vs C-Steel, Steel Side

⁶ Thrust, vs M90-44, Material Side

⁷ Thrust, vs C-Steel, Material Side

⁸ Thrust, vs M90-44, M90-44 Side