

DURACON® GB-25R

Polyplastics - Acetal (POM) Copolymer

General Information

Product Description

Low Warpage

GB 25% Reinforce, Low Warpage

General

Filler / Reinforcement	• Glass Bead, 25% Filler by Weight
Features	• Copolymer • Low Warpage
UL File Number	• E45034
Forms	• Pellets
Processing Method	• Injection Molding
Part Marking Code (ISO 11469)	• >POM-GB25<

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.59	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	7.0	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	5.0	cm ³ /10min	ISO 1133
Molding Shrinkage ²			ISO 294-4
Across Flow : 0.0787 in	1.6	%	
Flow : 0.0787 in	1.9	%	
Water Absorption (24 hr, 73°F, 0.0394 in)	0.50	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	580000	psi	ISO 527-1
Tensile Stress	8560	psi	ISO 527-2
Tensile Strain (Break)	10	%	ISO 527-2
Flexural Modulus	551000	psi	ISO 178
Flexural Stress	15100	psi	ISO 178
Coefficient of Friction			JIS K7218
Dynamic ³	0.37		
vs. Steel - Dynamic ⁴	0.51		
Wear Factor			JIS K7218
8.7 psi, 30 ft/min ⁵	20	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	
71 psi, 59 ft/min ⁶	250	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	
71 psi, 59 ft/min ⁷	3500	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	
8.7 psi, 30 ft/min ⁸	4000	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	1.6	ft·lb/in ²	ISO 179/1eA

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Unannealed	230	°F	ISO 75-2/A
CLTE - Flow (73 to 131°F)	5.0E-5	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
Electric Strength (0.118 in)	530	V/mil	IEC 60243-1
Flammability	Nominal Value	Unit	Test Method
Flame Rating	HB		UL 94
Additional Information	Nominal Value	Unit	
Color Number	CF3500/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 vs M90-44, Material Side

⁶ vs C-Steel, Steel Side

⁷ vs C-Steel, Material Side

⁸ vs M90-44, M90-44 Side