

DURACON® GH-20

Polyplastics - Acetal (POM) Copolymer

General Information

Product Description

Glass Fiber Reinforced

GF20% Reinforced

General

| | |
|-------------------------------|-------------------------------------|
| Filler / Reinforcement | • Glass Fiber, 20% Filler by Weight |
| Features | • Copolymer |
| UL File Number | • E45034 |
| Forms | • Pellets |
| Processing Method | • Injection Molding |
| Part Marking Code (ISO 11469) | • >POM-GF20< |

Properties¹

| Physical | Nominal Value | Unit | Test Method |
|---|---------------|--|-------------|
| Density | 1.54 | 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) | 2.3 | cm ³ /10min | ISO 1133 |
| Molding Shrinkage ² | | | ISO 294-4 |
| Across Flow : 0.0787 in | 1.1 | % | |
| Flow : 0.0787 in | 0.80 | % | |
| Water Absorption (24 hr, 73°F, 0.0394 in) | 0.70 | % | ISO 62 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Modulus | 1.02E+6 | psi | ISO 527-1 |
| Tensile Stress | 14500 | psi | ISO 527-2 |
| Tensile Strain (Break) | 2.0 | % | ISO 527-2 |
| Flexural Modulus | 870000 | psi | ISO 178 |
| Flexural Stress | 19600 | psi | ISO 178 |
| Coefficient of Friction | | | JIS K7218 |
| Dynamic ³ | 0.42 | | |
| vs. Steel - Dynamic ⁴ | 0.55 | | |
| Wear Factor | | | JIS K7218 |
| 71 psi, 59 ft/min ⁵ | 99 | 10 ⁻¹⁰ in ³ ·min/ft·lb·hr | |
| 8.7 psi, 30 ft/min ⁶ | 150 | 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 | 5000 | 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) | 85 | | ISO 2039-2 |

DURACON® GH-20

Polyplastics - Acetal (POM) Copolymer

| Thermal | Nominal Value | Unit | Test Method |
|--|---------------|----------|-----------------|
| Deflection Temperature Under Load 264 psi, Unannealed | 316 | °F | ISO 75-2/A |
| CLTE - Flow (73 to 131°F) | 1.7E-5 | in/in/°F | Internal Method |
| CLTE - Transverse (73 to 131°F) | 5.6E-5 | in/in/°F | Internal Method |
| Flammability | Nominal Value | Unit | Test Method |
| Flame Rating | HB | | UL 94 |
| Additional Information | Nominal Value | Unit | |
| Color Number | CF3500 | | |

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 C-Steel, Steel Side

⁶ vs M90-44, Material Side

⁷ vs C-Steel, Material Side

⁸ vs M90-44, M90-44 Side