

DURACON® TR-10D

Polyplastics - Acetal (POM) Copolymer

General Information

Product Description

Mineral Reinforced

High Rigidity, Low Warpage

General

Filler / Reinforcement	• Mineral		
Features	• Copolymer	• High Rigidity	• Low Warpage
UL File Number	• E45034		
Forms	• Pellets		
Processing Method	• Injection Molding		
Part Marking Code (ISO 11469)	• >POM-TD10<		

Properties¹

Physical	Nominal Value	Unit	Test Method
Density	1.48	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	39	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	31	cm ³ /10min	ISO 1133
Molding Shrinkage ²			ISO 294-4
Across Flow : 0.0787 in	1.8	%	
Flow : 0.0787 in	1.8	%	
Water Absorption (24 hr, 73°F, 0.0394 in)	0.50	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	537000	psi	ISO 527-1
Tensile Stress	8270	psi	ISO 527-2
Tensile Strain (Break)	5.0	%	ISO 527-2
Flexural Modulus	508000	psi	ISO 178
Flexural Stress	13100	psi	ISO 178
Coefficient of Friction			JIS K7218
Dynamic ³	0.40		
vs. Steel - Dynamic ⁴	0.44		
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	250	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	
71 psi, 59 ft/min ⁷	1200	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
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	90		ISO 2039-2

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Unannealed	234	°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
Surface Resistivity	2.0E+16	ohms	IEC 60093
Volume Resistivity	3.0E+14	ohms·cm	IEC 60093
Flammability	Nominal Value	Unit	Test Method
Flame Rating	HB		UL 94
Additional Information	Nominal Value	Unit	
Color Number	CF2001		

Processing Information

Injection	Nominal Value	Unit
Injection Velocity	12 to 118	in/min

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 0.49 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