

Plaslube® PA6 GF40 ML5 HS 12MM

 Techmer Polymer Modifiers - *Polyamide 6*

General Information

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 40% Filler by Weight
Additive	• Heat Stabilizer • Molybdenum Disulfide Lubricant
Features	• Heat Stabilized • Lubricated
Appearance	• Colors Available
Forms	• Pellets
Processing Method	• Injection Molding

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.46		ASTM D792
Molding Shrinkage - Flow (0.125 in)	3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.80	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	29000	psi	ASTM D638
Tensile Elongation (Break)	3.0	%	ASTM D638
Flexural Modulus	1.50E+6	psi	ASTM D790
Flexural Strength	39000	psi	ASTM D790
Coefficient of Friction			ASTM D1894
vs. Steel - Dynamic	0.31		
vs. Steel - Static	0.24		
Wear Factor	75	10 ⁻⁴ -10 in ³ ·min/ft·lb·hr	ASTM D3702
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	2.7	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	14	ft·lb/in	ASTM D4812
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	122		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	425	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	420	°F	ASTM D648
CLTE - Flow	1.5E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+14	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	450	V/mil	ASTM D149

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	4.0	hr
Rear Temperature	500 to 580	°F
Middle Temperature	500 to 580	°F
Front Temperature	500 to 580	°F
Processing (Melt) Temp	470 to 520	°F
Mold Temperature	150 to 200	°F
Back Pressure	0.00 to 50.0	psi
Screw Speed	30 to 60	rpm

