Plaslube® POM HO TL1

Techmer Polymer Modifiers - *Acetal (POM) Homopolymer*

General Information

General			
Material Status	• Commercial: Active		
Availability	• North America		
Additive	• PTFE Lubricant: 1%		
Features	• Homopolymer	• Lubricated	• Wear Resistant
Appearance	• Colors Available	• Colors Available	
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.40		ASTM D792
Molding Shrinkage - Flow (0.125 in)	0.020	in/in	ASTM D955
Water Absorption (24 hr)	0.17	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Break)	9340	psi	ASTM D638
Tensile Elongation (Yield)	18	%	ASTM D638
Flexural Modulus	430000	psi	ASTM D790
Flexural Strength	13000	psi	ASTM D790
Coefficient of Friction			ASTM D1894
vs. Steel - Dynamic	0.22		
vs. Steel - Static	0.19		
Wear Factor	50	10^-10 in³·min/ft·lb·hr	ASTM D3702
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F, 0.125 in)	1.0	ft·lb/in	ASTM D256
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (M-Scale)	92		ASTM D785
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	330	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	212	°F	ASTM D648
CLTE - Flow	5.0E-5	in/in/°F	ASTM D696
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	450	V/mil	ASTM D149

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	160	°F
Drying Time	2.0	hr
Suggested Max Moisture	0.20	%
Rear Temperature	350 to 380	°F
Middle Temperature	370 to 410	°F
Front Temperature	360 to 390	°F
Nozzle Temperature	350 to 400	°F
Processing (Melt) Temp	380 to 420	°F
Mold Temperature	180 to 250	°F
Injection Rate	Moderate	
Back Pressure	50.0 to 100	psi
Screw Speed	70 to 80	rpm