

Plaslube® POM HO TL20

Techmer Polymer Modifiers - Acetal (POM) Homopolymer

General Information
General

| | |
|-------------------|---------------------------------|
| Material Status | • Commercial: Active |
| Availability | • North America |
| Additive | • PTFE Lubricant |
| Features | • Homopolymer • Lubricated |
| Appearance | • Colors Available |
| Processing Method | • Injection Molding |

Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|---|----------------------|--|--------------------|
| Density / Specific Gravity | 1.52 | | ASTM D792 |
| Molding Shrinkage - Flow (0.125 in) | 0.020 | in/in | ASTM D955 |
| Water Absorption (24 hr) | 0.15 | % | ASTM D570 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength (Break) | 7200 | psi | ASTM D638 |
| Tensile Elongation (Break) | 5.0 | % | ASTM D638 |
| Flexural Modulus | 400000 | psi | ASTM D790 |
| Flexural Strength | 11000 | psi | ASTM D790 |
| Coefficient of Friction | | | ASTM D1894 |
| vs. Steel - Dynamic | 0.12 | | |
| vs. Steel - Static | 0.070 | | |
| Wear Factor | 13 | 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) | 0.90 | ft·lb/in | ASTM D256 |
| Unnotched Izod Impact (73°F, 0.125 in) | 5.0 | ft·lb/in | ASTM D4812 |
| Hardness | Nominal Value | Unit | Test Method |
| Rockwell Hardness (R-Scale) | 79 | | ASTM D785 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed) | 320 | °F | ASTM D648 |
| Deflection Temperature Under Load (264 psi, Unannealed) | 215 | °F | ASTM D648 |
| Melting Temperature | 324 | °F | |
| CLTE - Flow | 5.5E-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)) | 500 | V/mil | ASTM D149 |
| Flammability | Nominal Value | Unit | Test Method |
| Flame Rating (0.06 in) | HB | | UL 94 |

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 |



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|------------------|-----------------|
| Mold Temperature | 180 to 250 °F |
| Injection Rate | Moderate |
| Back Pressure | 50.0 to 100 psi |
| Screw Speed | 70 to 80 rpm |

Notes

¹ Typical properties: these are not to be construed as specifications.

