LubriOne™ LB4200-5010 Black

Acetal (POM) Copolymer

Key Characteristics

Product Description		
LubriOne™ Lubricated and Wear-Resistant Compounds have been specifically formulated to be self-lubricating materials, offering low coefficient of friction and improved wear resistance properties. LubriOne compounds have been demonstrated to reduce friction, noise, vibration, heat buildup and improve product durability.		
General		
Material Status	• Commercial: Active	
Regional Availability	• Europe	
Features	• Copolymer	• Lubricated
Uses	• Automotive Applications • Consumer Applications	• Electrical/Electronic Applications • Industrial Applications
Appearance	• Black	
Forms	• Pellets	
Processing Method	• Injection Molding	

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.34 to 1.38	1.34 to 1.38	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	8.0 to 12 g/10 min	8.0 to 12 g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	6.00 to 8.00 cm³/10min	6.00 to 8.00 cm³/10min	ISO 1133
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus	328000 psi	2260 MPa	ISO 527-2
Tensile Strength (Yield)	7250 psi	50.0 MPa	ISO 527-2
Tensile Strain (Break)	35 %	35 %	ISO 527-2
Flexural Modulus	276000 psi	1900 MPa	ISO 178
Flexural Strength	9430 psi	65.0 MPa	ISO 178
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Charpy Notched Impact Strength	3.1 ft·lb/in²	6.5 kJ/m²	ISO 179
Charpy Unnotched Impact Strength	No Break	No Break	ISO 179
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Heat Deflection Temperature			ISO 75-2/B
66 psi (0.45 MPa), Annealed	293 °F	145 °C	
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Annealed	167 °F	75.0 °C	
Vicat Softening Temperature	302 °F	150 °C	ISO 306
Melting Temperature	329 to 338 °F	165 to 170 °C	
Electrical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Comparative Tracking Index	600 V	600 V	IEC 10006
Flammability	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Flame Rating	HB	HB	UL 94
FMVSS Burning Speed	mm/min	mm/min	DIN 75200

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 to 212 °F	80 to 100 °C
Drying Time	4.0 hr	4.0 hr
Processing (Melt) Temp	374 to 410 °F	190 to 210 °C
Mold Temperature	167 to 212 °F	75 to 100 °C

Notes

[1] Typical values are not to be construed as specifications.

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