



LubriOne™ LB4200-5001 AR

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 • Electrical/Electronic Applications • Consumer 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 ²	1.40	1.40	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)	6.00 to 8.00 cm ³ /10min	6.00 to 8.00 cm ³ /10min	ISO 1133
Molding Shrinkage - Flow	0.015 to 0.021 in/in	1.5 to 2.1 %	ISO 294-4
Molding Shrinkage - Across Flow	1.7 to 2.3 %	1.7 to 2.3 %	ISO 294-4
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus	290000 psi	2000 MPa	ISO 527-2
Tensile Strength (Yield)	7250 psi	50.0 MPa	ISO 527-2
Tensile Strain (Break)	30 %	30 %	ISO 527-2
Flexural Modulus	261000 psi	1800 MPa	ISO 178
Flexural Strength	8700 psi	60.0 MPa	ISO 178
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength	2.4 ft-lb/in ²	5.0 kJ/m ²	ISO 179
Charpy Unnotched Impact Strength	No Break	No Break	ISO 179
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Heat Deflection Temperature 66 psi (0.45 MPa), Annealed	284 °F	140 °C	ISO 75-2/B
Heat Deflection Temperature 264 psi (1.8 MPa), Annealed	176 °F	80.0 °C	ISO 75-2/A
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

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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.

² +0.02

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