



# LubriOne™ GF-1010 40 MS 2 HS Black 37

## Polyamide 6

### 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	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Wear Resistance • Heat Stabilized	• High Stiffness • Nucleated	
Uses	• Appliance Components • Automotive Applications • Bearings • Business Equipment	• Consumer Applications • Conveyor Parts • Gears • Industrial Applications	• Printer Parts • Pulleys • Rollers
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

### Technical Properties <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.41	1.41	ASTM D792
Molding Shrinkage - Flow	0.010 to 0.020 in/in	1.0 to 2.0 %	ASTM D955
Water Absorption (24 hr)	0.70 %	0.70 %	ASTM D570
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus	1.33E+6 psi	9170 MPa	ASTM D638
Tensile Strength (Yield)	17700 psi	122 MPa	ASTM D638
Tensile Strength <sup>2</sup> (Break)	17700 psi	122 MPa	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	4.5 %	4.5 %	ASTM D638
Flexural Modulus	1.30E+6 psi	8960 MPa	ASTM D790
Flexural Strength	28000 psi	193 MPa	ASTM D790
Coefficient of Friction			ASTM D1894
vs. Steel - Dynamic	0.21	0.21	
vs. Steel - Static	0.31	0.31	
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
73°F (23°C), 0.250 in (6.35 mm), Injection Molded	3.0 ft-lb/in	160 J/m	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load 66 psi (0.45 MPa), Unannealed	405 °F	207 °C	ASTM D648
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed	365 °F	185 °C	ASTM D648

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## Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	160 to 170 °F	71.1 to 76.7 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Processing (Melt) Temp	480 to 530 °F	249 to 277 °C
Mold Temperature	180 to 200 °F	82.2 to 93.3 °C

## Notes

<sup>1</sup> Typical values are not to be construed as specifications.

<sup>2</sup> Type I, 0.20 in/min (5.1 mm/min)

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