



# LubriOne™ PC-20GF/15T

## Polycarbonate

### 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	• Low Friction	• Lubricated	• Wear Resistant
Uses	• Appliance Components • Automotive Applications • Bearings • Business Equipment	• Consumer Applications • Conveyor Parts • Gears • Industrial Applications	• Printer Parts • Pulleys • Rollers
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Injection Molding		

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

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.45	1.45	ASTM D792
Molding Shrinkage - Flow	2.5E-3 to 4.0E-3 in/in	0.25 to 0.40 %	ASTM D955
Water Absorption (24 hr, 0.125 in (3.18 mm))	0.080 %	0.080 %	ASTM D570
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus <sup>2</sup>	225000 psi	1550 MPa	ASTM D638
Tensile Strength <sup>2</sup> (Yield)	12000 psi	82.7 MPa	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	5.0 to 10 %	5.0 to 10 %	ASTM D638
Flexural Modulus	650000 psi	4480 MPa	ASTM D790
Flexural Strength	21000 psi	145 MPa	ASTM D790
Coefficient of Friction			ASTM D1894
vs. Steel - Dynamic	0.43	0.43	
vs. Steel - Static	0.18	0.18	
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact 73°F (23°C), 0.125 in (3.18 mm), Injection Molded	2.8 ft-lb/in	150 J/m	ASTM D256A
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load 66 psi (0.45 MPa), Unannealed, 0.250 in (6.35 mm)	291 °F	144 °C	ASTM D648
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	280 °F	138 °C	ASTM D648
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	1.0E+14 ohms	1.0E+14 ohms	ASTM D257
Volume Resistivity	1.0E+14 ohms·cm	1.0E+14 ohms·cm	ASTM D257

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Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating	V-0	V-0	UL 94

### Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	248 to 266 °F	120 to 130 °C
Drying Time	4.0 hr	4.0 hr
Processing (Melt) Temp	550 to 600 °F	288 to 316 °C
Mold Temperature	176 to 230 °F	80.0 to 110 °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)

### CONTACT INFORMATION

#### Americas

United States - Avon Lake  
+1 440 930 1000

United States - McHenry  
+1 815 385 8500

#### Asia

China - Guangzhou  
+86 20 8732 7260

China - Shenzhen  
+86 755 2969 2888

China - Suzhou  
+86 512 6823 24 38

China - Suzhou  
+86 512 6265 2600

Hong Kong -  
+852 2690 5332

Taiwan - Yonghe City,  
+886 9396 99740, +886 2929 1849

#### Europe

Germany - Gaggenau  
+49 7225 6802 0

Spain - Barbastró (Huesca)  
+34 974 310 314



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www.polyone.com

#### PolyOne Americas

33587 Walker Road  
Avon Lake, Ohio 44012  
United States  
+1 440 930 1000  
+1 866 POLYONE

#### PolyOne Asia

No. 88 Guoshoujing Road  
Z.J Hi-tech Park, Pudong  
Shanghai, 201203, China  
+86 21 5080 1188

#### PolyOne Europe

6 Gällewee  
+352 269 050 35

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