



LubriOne™ ES-10CF/15T BLACK

Polyethersulfone

Key Characteristics

Product Description	
PTFE lubricated	
General	
Material Status	• Commercial: Active
Regional Availability	• Asia Pacific
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight
Additive	• PTFE Lubricant
Features	• Lubricated
Appearance	• Black
Processing Method	• Injection Molding

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.46	1.46	ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 4.0E-3 in/in	0.20 to 0.40 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	750000 psi	5170 MPa	ASTM D638
Tensile Strength ²	14900 psi	103 MPa	ASTM D638
Tensile Elongation ² (Break)	3.0 %	3.0 %	ASTM D638
Flexural Modulus ³	1.09E+6 psi	7500 MPa	ASTM D790
Flexural Strength ³	22000 psi	152 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256
73°F (23°C), 0.126 in (3.20 mm)	1.1 ft·lb/in	59 J/m	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.126 in (3.20 mm)	399 °F	204 °C	
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	1.0E+2 to 1.0E+4 ohms	1.0E+2 to 1.0E+4 ohms	ASTM D257
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating (0.06 in (1.6 mm))	V-0	V-0	UL 94

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	302 to 320 °F	150 to 160 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Rear Temperature	644 to 716 °F	340 to 380 °C
Middle Temperature	644 to 716 °F	340 to 380 °C
Front Temperature	644 to 716 °F	340 to 380 °C
Mold Temperature	284 to 320 °F	140 to 160 °C

Copyright © 2016 PolyOne Corporation. PolyOne makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. PolyOne makes no warranties or guarantees respecting suitability of either PolyOne's products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. POLYONE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.

Injection Notes

Injection Pressure: MED-HIGH
Hold Pressure: MED-HIGH
Screw Speed: MODERATE
Back Pressure: LOW

Notes

¹ Typical values are not to be construed as specifications.

² 0.20 in/min (5.0 mm/min)

³ 0.051 in/min (1.3 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 - Barbastro (Huesca)
+34 974 310 314



Beyond Polymers.

Better Business Solutions.™

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 Giällewee
+352 269 050 35

Copyright ©, 2016 PolyOne Corporation. PolyOne makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. PolyOne makes no warranties or guarantees respecting suitability of either PolyOne's products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. POLYONE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.