

## SABIC Innovative Plastics LNP LUBRICOMP 5CL23 FP-V (PVDF)

Category : Polymer , Thermoplastic , Fluoropolymer , PVDF

### Material Notes:

LNP\* LUBRICOMP\* 5CL23 is a compound based on PVDF resin containing 15% Carbon Fiber, 10% PTFE. Added features include: Wear Resistant.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_SABIC-Innovative-Plastics-LNP-LUBRICOMP-5CL23-FP-V-PVDF.php](http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-LNP-LUBRICOMP-5CL23-FP-V-PVDF.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.84 g/cc	1.84 g/cc	ASTM D792
Density	1.84 g/cc	0.0665 lb/in <sup>3</sup>	ASTM D792
Moisture Absorption	0.0300 %	0.0300 %	50% RH, 24 hrs; ASTM D570
	0.0500 %	0.0500 %	23°C / 50% RH; ISO 62
Linear Mold Shrinkage, Flow	0.0030 - 0.0050 cm/cm	0.0030 - 0.0050 in/in	ASTM D955
	@Time 86400 sec	@Time 24.0 hour	
Linear Mold Shrinkage, Transverse	0.010 - 0.030 cm/cm	0.010 - 0.030 in/in	ASTM D955
	@Time 86400 sec	@Time 24.0 hour	

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	77.0 MPa	11200 psi	5 mm/min; ISO 527
	84.0 MPa	12200 psi	Type I, 5 mm/min; ASTM D638
Elongation at Break	0.70 %	0.70 %	5 mm/min; ISO 527
	0.80 %	0.80 %	Type I, 5 mm/min; ASTM D638
Tensile Modulus	14.46 GPa	2097 ksi	1 mm/min; ISO 527
	15.78 GPa	2289 ksi	5 mm/min; ASTM D638
Flexural Strength	100 MPa	14500 psi	ISO 178
Flexural Yield Strength	108 MPa	15700 psi	1.3 mm/min, 50 mm span; ASTM D790
Flexural Modulus	11.87 GPa	1722 ksi	2 mm/min; ISO 178
	12.5 GPa	1810 ksi	1.3 mm/min, 50 mm span; ASTM D790
Izod Impact, Notched	0.550 J/cm	1.03 ft-lb/in	ASTM D256

Izod Impact, Unnotched Mechanical Properties	2.01 J/cm Metric	3.77 ft-lb/in English	ASTM D4812 Comments
Izod Impact, Notched (ISO)	5.00 kJ/m <sup>2</sup>	2.38 ft-lb/in <sup>2</sup>	80*10*4; ISO 180/1A
Izod Impact, Unnotched (ISO)	13.0 kJ/m <sup>2</sup>	6.19 ft-lb/in <sup>2</sup>	80*10*4; ISO 180/1U
Dart Drop, Total Energy	13.0 J @Temperature 23.0 °C	9.59 ft-lb @Temperature 73.4 °F	ASTM D3763
Impact Test	3.00 J	2.21 ft-lb	Multiaxial Impact; ISO 6603
Coefficient of Friction, Dynamic	0.52	0.52	ASTM D3702 Modified
Coefficient of Friction, Static	0.44	0.44	ASTM D3702 Modified
K (wear) Factor	8.06 x 10 <sup>-8</sup> mm <sup>3</sup> /N-M	4.00 x 10 <sup>-10</sup> in <sup>3</sup> -min/ft-lb-hr	Washer; ASTM D3702 Modified

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	21.0 µm/m-°C @Temperature -30.0 - 30.0 °C	11.7 µin/in-°F @Temperature -22.0 - 86.0 °F	ASTM D696
CTE, linear, Transverse to Flow	84.0 µm/m-°C @Temperature -30.0 - 30.0 °C	46.7 µin/in-°F @Temperature -22.0 - 86.0 °F	ASTM D696
Deflection Temperature at 0.46 MPa (66 psi)	166 °C	331 °F	Flatw 80*10*4 sp=64mm; ISO 75/Bf
	168 °C @Thickness 3.20 mm	334 °F @Thickness 0.126 in	unannealed; ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	158 °C	316 °F	Flatw 80*10*4 sp=64mm; ISO 75/Af
	164 °C @Thickness 3.20 mm	327 °F @Thickness 0.126 in	unannealed; ASTM D648

## Contact Songhan Plastic Technology Co.,Ltd.

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