

LNP Lubricomp* UCL-4036 HS

SABIC Innovative Plastics Asia Pacific - Polyphthalamide

General Information

General

Filler / Reinforcement	• Carbon fiber reinforcement		
Additive	• Heat Stabilizer	• Lubricant, PTFE	
Features	• Electrically Conductive	• Heat Stabilized	• Lubricated
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM and ISO Properties ¹

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Specific Gravity (Method A)	1.41	1.41	ASTM D792
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	2.92E+6 psi	20100 MPa	ASTM D638
Tensile Strength (Break)	31400 psi	216 MPa	ASTM D638
Tensile Stress (Break)	31000 psi	214 MPa	ISO 527-1, -2
Tensile Elongation (Break)	1.6 %	1.6 %	ASTM D638
Tensile Strain (Break)	1.2 %	1.2 %	ISO 527-1, -2
Flexural Modulus	2.73E+6 psi	18800 MPa	ASTM D790
Flexural Modulus	3.29E+6 psi	22700 MPa	ISO 178
Flexural Strength	47000 psi	324 MPa	ASTM D790
Flexural Strength	48400 psi	334 MPa	ISO 178
Coefficient of Friction			ASTM D1894
vs. Steel - Dynamic	0.36	0.36	
vs. Steel - Static	0.27	0.27	
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (0.125 in (3.18 mm))	1.80 ft-lb/in	96.1 J/m	ASTM D256
Notched Izod Impact Strength	3.85 ft-lb/in ²	8.10 kJ/m ²	ISO 180
Unnotched Izod Impact (0.125 in (3.18 mm))	17.6 ft-lb/in	939 J/m	ASTM D256
Unnotched Izod Impact Strength	19.0 ft-lb/in ²	39.9 kJ/m ²	ISO 180
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed	535 °F	279 °C	
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Surface Resistivity	1.0E+2 to ohms 1.0E+6	1.0E+2 to ohms 1.0E+6	ASTM D4496

Additional Properties

The values displayed above as Coef. of Friction and Wear Factor were tested in accordance with SABIC WI-0687.

COEFFICIENT OF FRICTION vs. Steel, Dynamic @ 40 psi, 50 ft/min, SABIC WI-0687: 0.36

COEFFICIENT OF FRICTION vs. Steel, Static @ 40 psi, SABIC WI-0687: 0.27

WEAR FACTOR @ 40 psi, 50 ft/min, SABIC WI-0687: 16 10⁻¹⁰ in⁵-min/ft-lb-hr

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Processing Information		
Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	250 °F	121 °C
Drying Time	4.0 hr	4.0 hr
Suggested Max Moisture	0.15 %	0.15 %
Processing (Melt) Temp	600 to 625 °F	316 to 329 °C
Mold Temperature	300 to 340 °F	149 to 171 °C
Back Pressure	25.0 to 50.0 psi	0.172 to 0.345 MPa

Notes

¹ Typical properties: these are not to be construed as specifications.