



**Americas: COMMERCIAL** 

## LNP\* Lubricomp\* Compound LL004

Also known as: LL-4040 Product Reorder Name: LL004

LNP LUBRICOMP\* LL004 is a compound based on Polyetheretherketone resin containing PTFE. Added features of this material include: Internally Lubricated.

## **Property**

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yield	74	MPa	ASTM D 638
Tensile Stress, break	69	MPa	ASTM D 638
Tensile Strain, yield	5.8	%	ASTM D 638
Tensile Strain, break	23.3	%	ASTM D 638
Tensile Modulus, 50 mm/min	2890	MPa	ASTM D 638
Flexural Stress	117	MPa	ASTM D 790
Flexural Modulus	2960	MPa	ASTM D 790
Tensile Stress, yield	73	MPa	ISO 527
Tensile Stress, break	69	MPa	ISO 527
Tensile Strain, yield	5	%	ISO 527
Tensile Strain, break	11.8	%	ISO 527
Tensile Modulus, 1 mm/min	3060	MPa	ISO 527
Flexural Stress	118	MPa	ISO 178
Flexural Modulus	3320	MPa	ISO 178
IMPACT	Value	Unit	Standard
zod Impact, unnotched, 23°C	1553	J/m	ASTM D 4812
zod Impact, notched, 23°C	96	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	2	J	ASTM D 3763
Multiaxial Impact	1	J	ISO 6603
zod Impact, unnotched 80*10*4 +23°C	91	kJ/m²	ISO 180/1U
zod Impact, notched 80*10*4 +23°C	8	kJ/m²	ISO 180/1A
PHYSICAL	Value	Unit	Standard
Density	1.37	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.06	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	1.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1.9	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	1.3	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	1.85	%	ISO 294
Wear Factor Washer	128	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.52	-	ASTM D 3702 Modified
Static COF	0.43	-	ASTM D 3702 Modified
Density	1.37	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.12	%	ISO 62

Source GMD, last updated:10/04/2004

Parameter		
Injection Molding	Value	Unit
Drying Temperature	120 - 150	°C
Drying Time	4	hrs
Maximum Moisture Content	0.1	%
Melt Temperature	380 - 390	°C
Front - Zone 3 Temperature	380 - 395	°C
Middle - Zone 2 Temperature	365 - 375	°C
Rear - Zone 1 Temperature	350 - 360	°C
Mold Temperature	140 - 165	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	60 - 100	rpm

Source GMD, last updated:10/04/2004

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

## PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

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- (2) Only typical data for selection purposes. Not to be used for part or tool design.
- (3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
- (4) Internal measurements according to UL standards.

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