



**Americas: COMMERCIAL** 

## LNP\* Lubricomp\* Compound LL002

Also known as: LUBRICOMP LL-4020 Product Reorder Name: LL002

LNP\* Lubricomp\* LL002 is a compound based on Polyetheretherketone (PEEK) containing PTFE.

## **Property**

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 5 mm/min	77	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	79	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	5.3	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	52	%	ASTM D 638
Tensile Modulus, 50 mm/min	3330	MPa	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	3070	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	76	MPa	ISO 527
Tensile Stress, break, 5 mm/min	73	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	5	%	ISO 527
Tensile Strain, break, 5 mm/min	17.8	%	ISO 527
Tensile Modulus, 1 mm/min	3280	MPa	ISO 527
Flexural Stress	103	MPa	ISO 178
Flexural Modulus, 2 mm/min	3120	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	2990	J/m	ASTM D 4812
Izod Impact, notched, 23°C	84	J/m	ASTM D 256
Multiaxial Impact	1	J	ISO 6603
Instrumented Impact Total Energy, 23°C	5	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	158	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	166	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	149	°C	ASTM D 648
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	155	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	149	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.37	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.08	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.3 - 0.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.7 - 0.9	%	ASTM D 955
Wear Factor Washer	21	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified
Wear Factor Ring	-1	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.39	-	ASTM D 3702 Modified
Static COF	0.35	-	ASTM D 3702 Modified
Density	1.37	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.1	%	ISO 62

## **Processing**

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:2009/01/08

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.
- (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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