

## LNP\* Lubricomp\* Compound IL004

Asia Pacific: COMMERCIAL

Also known as: IL-4040  
Product Reorder Name: IL004

LNP\* Lubricomp\* IL004 is a compound based on Nylon 6/12 resin containing PTFE. Added features of this material include: Internally Lubricated.

### Property

TYPICAL PROPERTIES <sup>(1)</sup>			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yield	47	MPa	ASTM D 638
Tensile Stress, break	47	MPa	ASTM D 638
Tensile Strain, yield	13.6	%	ASTM D 638
Tensile Strain, break	14.3	%	ASTM D 638
Tensile Modulus, 50 mm/min	2060	MPa	ASTM D 638
Flexural Modulus	2060	MPa	ASTM D 790
Tensile Stress, yield	49	MPa	ISO 527
Tensile Stress, break	49	MPa	ISO 527
Tensile Strain, yield	15.2	%	ISO 527
Tensile Strain, break	15.6	%	ISO 527
Tensile Modulus, 1 mm/min	2190	MPa	ISO 527
Flexural Stress	65	MPa	ISO 178
Flexural Modulus	2000	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	571	J/m	ASTM D 4812
Izod Impact, notched, 23°C	37	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	3	J	ASTM D 3763
Multiaxial Impact	0	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	39	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m <sup>2</sup>	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	157	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	61	°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	64	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.18	g/cm <sup>3</sup>	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.1	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	1.7 - 1.9	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1.7 - 1.9	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	1.8	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	1.8	%	ISO 294
Wear Factor Washer	18	10 <sup>-4</sup> -10 <sup>-5</sup> in <sup>3</sup> -min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.24	-	ASTM D 3702 Modified
Static COF	0.27	-	ASTM D 3702 Modified
Density	1.18	g/cm <sup>3</sup>	ISO 1183

## Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.12 - 0.2	%
Melt Temperature	270 - 275	°C
Front - Zone 3 Temperature	270 - 280	°C
Middle - Zone 2 Temperature	260 - 270	°C
Rear - Zone 1 Temperature	255 - 265	°C
Mold Temperature	65 - 95	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

Source GMD, last updated:09/24/2008

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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