

**LNP\* Lubricomp\* Compound DL004XXC**  
**Americas: COMMERCIAL**

LNP\* Lubricomp\* DL004XXC is a compound based on Polycarbonate containing PTFE. Characteristics of this grade are: Internally Lubricated.

TYPICAL PROPERTIES <sup>1</sup>	TYPICAL VALUE	Unit	Standard
<b>MECHANICAL</b>			
Tensile Stress, yld, Type I, 5 mm/min	430	kgf/cm <sup>2</sup>	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	390	kgf/cm <sup>2</sup>	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	6.2	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	28.9	%	ASTM D 638
Tensile Modulus, 50 mm/min	21200	kgf/cm <sup>2</sup>	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	740	kgf/cm <sup>2</sup>	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	21000	kgf/cm <sup>2</sup>	ASTM D 790
Tensile Stress, yield, 5 mm/min	44	MPa	ISO 527
Tensile Stress, break, 5 mm/min	39	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	5.9	%	ISO 527
Tensile Strain, break, 5 mm/min	29.3	%	ISO 527
Tensile Modulus, 1 mm/min	2050	MPa	ISO 527
Flexural Stress	63	MPa	ISO 178
Flexural Modulus, 2 mm/min	1930	MPa	ISO 178
<b>IMPACT</b>			
Izod Impact, unnotched, 23°C	190	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	10	cm-kgf/cm	ASTM D 256
Multiaxial Impact	214	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	244	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	178	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	11	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL</b>			
HDT, 0.45 MPa, 3.2 mm, unannealed	141	°C	ASTM D 648



(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±176°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.

(5) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

Source GMD, last updated:

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TYPICAL PROPERTIES <sup>1</sup>	TYPICAL VALUE	Unit	Standard
<b>THERMAL</b>			
HDT, 1.82 MPa, 3.2mm, unannealed	128	°C	ASTM D 648
CTE, -40°C to 40°C, flow	7.7E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	7.5E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	7.7E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.6E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	143	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	129	°C	ISO 75/Af
<b>PHYSICAL</b>			
Specific Gravity	1.3	-	ASTM D 792
Density	1.3	g/cm <sup>3</sup>	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.25	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.5 - 0.7	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.6 - 0.8	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.59	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	0.64	%	ISO 294
Wear Factor Washer	7	10 <sup>-10</sup> in <sup>4</sup> -min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.25	-	ASTM D 3702 Modified
Static COF	0.21	-	ASTM D 3702 Modified
Density	1.3	g/cm <sup>3</sup>	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.36	%	ISO 62



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
<b>Injection Molding</b>		
Drying Temperature	120	°C
Drying Time	4	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	300 - 315	°C
Front - Zone 3 Temperature	310 - 320	°C
Middle - Zone 2 Temperature	305 - 315	°C
Rear - Zone 1 Temperature	295 - 305	°C
Mold Temperature	80 - 110	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm



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