



LNP™ LUBRICOMP™ Compound DL004

Americas: COMMERCIAL

Also known as: LNP™ LUBRICOMP™ Compound DL-4040

Product reorder name: DL004

LNP™ LUBRICOMP™ DL004 is a compound based on Polycarbonate resin containing 20% PTFE. Added features of this material include: Wear Resistant.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	430	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	390	kgf/cm ²	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 ²	ASTM D 638
Flexural Stress	750	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	21000	kgf/cm ²	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
IMPACT			
Izod Impact, unnotched, 23°C	190	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	10	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	252	cm-kgf	ASTM D 3763
Multiaxial Impact	215	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	252	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	178	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	11	kJ/m ²	ISO 180/1A



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THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	141	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	128	°C	ASTM D 648
CTE, -40°C to 40°C, flow	7.74E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	7.56E-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
PHYSICAL			
Specific Gravity	1.3	-	ASTM D 792
Density	1.3	g/cm ³	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 ⁻¹⁰ in ⁵ -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 ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.36	%	ISO 62



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
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