



LNP™ LUBRICOMP™ Compound IL004

Americas: COMMERCIAL

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

Product reorder name: IL004

LNP LUBRICOMP IL004 is a compound based on Nylon 6/12 resin containing 20% PTFE. Added features of this material include: Wear Resistant.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yield	480	kgf/cm ²	ASTM D 638
Tensile Stress, break	480	kgf/cm ²	ASTM D 638
Tensile Strain, yield	13.6	%	ASTM D 638
Tensile Strain, break	14.3	%	ASTM D 638
Tensile Modulus, 50 mm/min	21000	kgf/cm ²	ASTM D 638
Flexural Modulus	21000	kgf/cm ²	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			
Izod Impact, unnotched, 23°C	58	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	3	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	31	cm-kgf	ASTM D 3763
Multiaxial Impact	5	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	39	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m ²	ISO 180/1A
THERMAL			
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



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THERMAL			
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			
Density	1.18	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.1	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	1.7 - 1.9	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	1.7 - 1.9	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	1.8	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	1.8	%	ISO 294
Wear Factor Washer	18	10 ⁻¹⁰ in ⁵ -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 ³	ISO 1183



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PROCESSING PARAMETERS	TYPICAL 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