



LNP™ LUBRICOMP™ Compound LL003

Americas: COMMERCIAL

Also known as: LNP™ LUBRICOMP™ Compound LL-4030

Product reorder name: LL003

LNP LUBRICOMP LL003 is a compound based on Polyetheretherketone resin containing 15% PTFE Lubricant. Added feature of this material is: Wear Resistant.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	650	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	650	kgf/cm ²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	4.5	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	4.5	%	ASTM D 638
Tensile Modulus, 50 mm/min	30600	kgf/cm ²	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	29900	kgf/cm ²	ASTM D 790
Tensile Stress, yield, 5 mm/min	62	MPa	ISO 527
Tensile Stress, break, 5 mm/min	62	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	3.3	%	ISO 527
Tensile Strain, break, 5 mm/min	3.3	%	ISO 527
Tensile Modulus, 1 mm/min	3070	MPa	ISO 527
Flexural Stress	92	MPa	ISO 178
Flexural Modulus, 2 mm/min	2750	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	73	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	4	cm-kgf/cm	ASTM D 256
Multiaxial Impact	8	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	31	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	37	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	156	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	146	°C	ASTM D 648



LNP™ LUBRICOMP™ Compound LL003

Americas: COMMERCIAL

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
CTE, -30°C to 30°C, flow	4.7E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	5.7E-05	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	156	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	147	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.39	-	ASTM D 792
Density	1.39	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.07	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.9 - 2	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	1 - 3	%	ASTM D 955
Wear Factor Washer	18	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.42	-	ASTM D 3702 Modified
Static COF	0.32	-	ASTM D 3702 Modified
Moisture Absorption (23°C / 50% RH)	0.08	%	ISO 62



LNP™ LUBRICOMP™ Compound LL003

Americas: COMMERCIAL

PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	150	°C
Drying Time	4 - 6	hrs
Front - Zone 3 Temperature	380 - 400	°C
Middle - Zone 2 Temperature	380 - 400	°C
Rear - Zone 1 Temperature	370 - 380	°C
Mold Temperature	175 - 190	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	60 - 100	rpm