



LNP™ LUBRICOMP™ Compound YP003

Americas: COMMERCIAL

Also known as: LNP™ LUBRICOMP™ Compound YL-4530

Product reorder name: YP003

LNP LUBRICOMP™ YP003 is a compound based on Polyester Elastomer resin containing 15% PTFE/Silicone. Added features of this material include: Wear Resistant.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yield	140	kgf/cm ²	ASTM D 638
Tensile Strain, yield	53.5	%	ASTM D 638
Tensile Modulus, 50 mm/min	2100	kgf/cm ²	ASTM D 638
Flexural Modulus	2600	kgf/cm ²	ASTM D 790
Tensile Stress, yield	14	MPa	ISO 527
Tensile Strain, yield	39.9	%	ISO 527
Tensile Modulus, 1 mm/min	240	MPa	ISO 527
Flexural Modulus	270	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	NB	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	24	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	281	cm-kgf	ASTM D 3763
Multiaxial Impact	274	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	NB	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	27	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	47	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.11E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	1.84E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	1.11E-04	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	1.84E-04	1/°C	ISO 11359-2
PHYSICAL			
Density	1.27	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.37	%	ASTM D 570



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
PHYSICAL			
Mold Shrinkage, flow, 24 hrs (5)	2.1	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	2	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	2.13	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	2.05	%	ISO 294
Wear Factor Washer	5	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.47	-	ASTM D 3702 Modified
Static COF	0.45	-	ASTM D 3702 Modified
Density	1.27	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.5	%	ISO 62



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.1	%
Melt Temperature	215 - 240	°C
Front - Zone 3 Temperature	225 - 240	°C
Middle - Zone 2 Temperature	205 - 215	°C
Rear - Zone 1 Temperature	180 - 195	°C
Mold Temperature	25 - 55	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm