+135-3858-6433 (GuangDong)
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LNP™ LUBRICOMP™ Compound WP004

Americas: COMMERCIAL

Also known as: LNP™ LUBRICOMP™ Compound WL-4540
Product reorder name: WP004

LNP™ LUBRICOMP™ WP004 is a compound based on PBT resin containing 20% PTFE/Silicone. Added feature of this grade is: Wear Resistant.

TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	370	kgf/cm²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	370	kgf/cm²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	10.7	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	11.2	%	ASTM D 638
Tensile Modulus, 50 mm/min	23200	kgf/cm²	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	22300	kgf/cm²	ASTM D 790
Tensile Stress, yield, 5 mm/min	37	MPa	ISO 527
Tensile Stress, break, 5 mm/min	37	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	11.3	%	ISO 527
Tensile Strain, break, 5 mm/min	11.9	%	ISO 527
Tensile Modulus, 1 mm/min	2240	MPa	ISO 527
Flexural Stress	64	MPa	ISO 178
Flexural Modulus, 2 mm/min	2120	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	27	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	3	cm-kgf/cm	ASTM D 256
Multiaxial Impact	7	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	22	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	19	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	3	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	182	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	55	°C	ASTM D 648

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TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
THERMAL			
CTE, -30°C to 30°C, flow	6.8E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	1.1E-04	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	158	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	54	°C	ISO 75/Af
PHYSICAL			
Moisture Absorption, 50% RH, 24 hrs	0.05	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	1 - 3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	1 - 3	%	ASTM D 955
Wear Factor Washer	16	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.24	-	ASTM D 3702 Modified
Static COF	0.13	-	ASTM D 3702 Modified
Density	1.42	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.09	%	ISO 62

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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	120	°C
Drying Time	4	hrs
Maximum Moisture Content	0.05	%
Melt Temperature	240 - 265	°C
Front - Zone 3 Temperature	260 - 270	°C
Middle - Zone 2 Temperature	245 - 255	°C
Rear - Zone 1 Temperature	220 - 230	°C
Mold Temperature	80 - 100	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm