



LNP™ LUBRICOMP™ Compound ZFL31XXC

Americas: COMMERCIAL

Also known as: LNP™ LUBRICOMP™ Compound ZFL-4031 HP

Product reorder name: ZFL31XXC

LNP LUBRICOMP ZFL31XXC is a compound based on PPE+PS resin containing 5% Glass Fiber, 15% PTFE. Added features of this material include: Wear Resistant

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	610	kgf/cm ²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	2.8	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	3.5	%	ASTM D 638
Tensile Modulus, 50 mm/min	40900	kgf/cm ²	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	1080	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	37200	kgf/cm ²	ASTM D 790
Tensile Stress, break, 5 mm/min	60	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.7	%	ISO 527
Tensile Strain, break, 5 mm/min	3.2	%	ISO 527
Tensile Modulus, 1 mm/min	3640	MPa	ISO 527
Flexural Stress	89	MPa	ISO 178
Flexural Modulus, 2 mm/min	4800	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	38	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	8	cm-kgf/cm	ASTM D 256
Multiaxial Impact	28	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	122	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	24	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	7	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	136	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	127	°C	ASTM D 648
CTE, -30°C to 30°C, flow	6.57E+01	1/°C	ASTM D 696



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
CTE, -30°C to 30°C, xflow	6.85E+01	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	134	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	127	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.21	-	ASTM D 792
Density	1.2	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.07	%	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
Wear Factor Washer	100	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.4	-	ASTM D 3702 Modified
Static COF	0.26	-	ASTM D 3702 Modified
Moisture Absorption (23°C / 50% RH)	0.1	%	ISO 62



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	120	°C
Drying Time	4	hrs
Melt Temperature	300 - 305	°C
Front - Zone 3 Temperature	300 - 310	°C
Middle - Zone 2 Temperature	290 - 300	°C
Rear - Zone 1 Temperature	275 - 290	°C
Mold Temperature	80 - 110	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm