



LNP™ LUBRICOMP™ Compound SCL36

Americas: COMMERCIAL

Also known as: LNP™ LUBRICOMP™ Compound SCL-4036

Product reorder name: SCL36

LNP LUBRICOMP SCL36 is a compound based on Nylon 12 resin containing 15% PTFE, 30% Carbon Fiber. Added features of this material include: Wear Resistant, Electrically Conductive.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	1600	kgf/cm ²	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1.9	%	ASTM D 638
Tensile Modulus, 50 mm/min	218200	kgf/cm ²	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	2190	kgf/cm ²	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	2180	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	161100	kgf/cm ²	ASTM D 790
Tensile Stress, break, 5 mm/min	130	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1	%	ISO 527
Tensile Modulus, 1 mm/min	19420	MPa	ISO 527
Flexural Stress	206	MPa	ISO 178
Flexural Modulus, 2 mm/min	16490	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	69	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	13	cm-kgf/cm	ASTM D 256
Multiaxial Impact	48	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	144	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	39	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	129	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	178	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	173	°C	ASTM D 648
CTE, -30°C to 30°C, flow	2.9E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	6.3E-05	1/°C	ASTM D 696



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THERMAL			
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	177	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	170	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.3	-	ASTM D 792
Density	1.3	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.09	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.04 - 0.06	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.4 - 0.6	%	ASTM D 955
Wear Factor Washer	22	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Wear Factor Ring	0	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.41	-	ASTM D 3702 Modified
Static COF	0.3	-	ASTM D 3702 Modified
Moisture Absorption (23°C / 50% RH)	0.14	%	ISO 62



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.12 - 0.2	%
Melt Temperature	225 - 240	°C
Front - Zone 3 Temperature	225 - 240	°C
Middle - Zone 2 Temperature	220 - 230	°C
Rear - Zone 1 Temperature	215 - 225	°C
Mold Temperature	70 - 80	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm