



LNP™ LUBRICOMP™ Compound RCP36

Americas: COMMERCIAL

Also known as: LNP™ LUBRICOMP™ Compound RCL-4536

Product reorder name: RCP36

LNP LUBRICOMP™ RCP36 is a compound based on Nylon 66 resin containing 30% Carbon Fiber, 15% PTFE/Silicone. Added features of this material include: Electrically Conductive, Wear Resistant.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, break	2050	kgf/cm ²	ASTM D 638
Tensile Strain, break	1.4	%	ASTM D 638
Tensile Modulus, 50 mm/min	300900	kgf/cm ²	ASTM D 638
Flexural Stress	3390	kgf/cm ²	ASTM D 790
Flexural Modulus	167300	kgf/cm ²	ASTM D 790
Tensile Stress, break	228	MPa	ISO 527
Tensile Strain, break	2	%	ISO 527
Tensile Modulus, 1 mm/min	23100	MPa	ISO 527
Flexural Stress	354	MPa	ISO 178
Flexural Modulus	21300	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	96	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	9	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	100	cm-kgf	ASTM D 3763
Multiaxial Impact	29	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	65	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	10	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	254	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	244	°C	ASTM D 648
CTE, -40°C to 40°C, flow	2.16E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	3.42E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	2.29E-05	1/°C	ISO 11359-2



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THERMAL			
CTE, -40°C to 40°C, xflow	3.42E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	245	°C	ISO 75/Af
PHYSICAL			
Density	1.34	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.93	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.2	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.4	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.15	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	0.43	%	ISO 294
Wear Factor Washer	6	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.25	-	ASTM D 3702 Modified
Static COF	0.22	-	ASTM D 3702 Modified
Density	1.34	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	1.35	%	ISO 62
FLAME CHARACTERISTICS			
UL Compliant, 94HB Flame Class Rating (3)(4)	1.5	mm	UL 94 by SABIC-IP



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.15 - 0.25	%
Melt Temperature	275 - 290	°C
Front - Zone 3 Temperature	295 - 305	°C
Middle - Zone 2 Temperature	280 - 295	°C
Rear - Zone 1 Temperature	265 - 275	°C
Mold Temperature	80 - 95	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm