



LNP™ LUBRICOMP™ Compound QCL349

Americas: COMMERCIAL

Also known as: LNP™ LUBRICOMP™ Compound QCL-4034 FR-1

Product reorder name: QCL349

LNP LUBRICOMP QCL349 is a compound based on Nylon 6/10 resin containing 15% PTFE, 20% Carbon Fiber. Added features of this material include: Wear Resistant, Flame Retardant, Electrically Conductive.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yield	1720	kgf/cm ²	ASTM D 638
Tensile Stress, break	1610	kgf/cm ²	ASTM D 638
Tensile Strain, yield	1.8	%	ASTM D 638
Tensile Strain, break	1.9	%	ASTM D 638
Tensile Modulus, 50 mm/min	168700	kgf/cm ²	ASTM D 638
Flexural Stress	2460	kgf/cm ²	ASTM D 790
Flexural Modulus	133500	kgf/cm ²	ASTM D 790
Tensile Stress, yield	162	MPa	ISO 527
Tensile Stress, break	162	MPa	ISO 527
Tensile Strain, yield	1.6	%	ISO 527
Tensile Strain, break	1.6	%	ISO 527
Tensile Modulus, 1 mm/min	15750	MPa	ISO 527
Flexural Stress	239	MPa	ISO 178
Flexural Modulus	13000	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	54	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	5	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	42	cm-kgf	ASTM D 3763
Multiaxial Impact	20	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	32	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	217	°C	ASTM D 648



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	200	°C	ASTM D 648
CTE, -40°C to 40°C, flow	5.58E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	1.98E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	5.7E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	1.9E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	218	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	198	°C	ISO 75/Af
PHYSICAL			
Density	1.52	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.1	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.1	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.8	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.11	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	0.78	%	ISO 294
Wear Factor Washer	444	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.34	-	ASTM D 3702 Modified
Static COF	0.28	-	ASTM D 3702 Modified
Density	1.52	g/cm ³	ISO 1183



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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	270 - 275	°C
Front - Zone 3 Temperature	270 - 280	°C
Middle - Zone 2 Temperature	260 - 270	°C
Rear - Zone 1 Temperature	250 - 260	°C
Mold Temperature	80 - 95	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm