

Americas: COMMERCIAL

LNP* Lubricomp* Compound QCL349

Also known as: QCL-4034 FR-1 Product Reorder Name: QCL349

LNP* Lubricomp* QCL349 is a compound based on Nylon 6/10 resin containing PTFE, Flame Retardant, Carbon Fiber. Added features of this material include: Internally Lubricated, Flame Retardant, Electrically Conductive.

Property

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yield	168	MPa	ASTM D 638
Tensile Stress, break	158	MPa	ASTM D 638
Tensile Strain, yield	1.8	%	ASTM D 638
Tensile Strain, break	1.9	%	ASTM D 638
Tensile Modulus, 50 mm/min	16540	MPa	ASTM D 638
Flexural Stress	241	MPa	ASTM D 790
Flexural Modulus	13100	MPa	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	Value	Unit	Standard
Izod Impact, unnotched, 23°C	534	J/m	ASTM D 4812
Izod Impact, notched, 23°C	53	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	4	J	ASTM D 3763
Multiaxial Impact	2	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	32	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	217	°C	ASTM D 648
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	Value	Unit	Standard
Density	1.52	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.1	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.1	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.8	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.11	%	ISO 294

Mold Shrinkage, xflow, 24 hrs	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/cm³	ISO 1183

Source GMD, last updated:06/13/2007

Processing

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

- (1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.
- (2) Only typical data for selection purposes. Not to be used for part or tool design.
- (3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
- (4) Internal measurements according to UL standards.

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