

Americas: COMMERCIAL

LNP* Lubricomp* Compound JCL36E

Also known as: LUBRICOMP JCL-4036 Product Reorder Name: JCL36E

LNP* Lubricomp* JCL-4036 is a Polyethersule (PES) base resin containing Carbon Fiber and PTFE.

Property

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 5 mm/min	142	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	142	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	0.5	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	0.5	%	ASTM D 638
Tensile Modulus, 50 mm/min	26880	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	199	MPa	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	198	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	23400	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	145	MPa	ISO 527
Tensile Stress, break, 5 mm/min	145	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	0.5	%	ISO 527
Tensile Strain, break, 5 mm/min	0.5	%	ISO 527
Tensile Modulus, 1 mm/min	26320	MPa	ISO 527
Flexural Stress	213	MPa	ISO 178
Flexural Modulus, 2 mm/min	22880	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	317	J/m	ASTM D 4812
Izod Impact, notched, 23°C	58	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	5	J	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	6	kJ/m²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	279	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	270	°C	ASTM D 648
CTE, -30°C to 30°C, flow	1.3E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	2.7E-05	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	280	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	270	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Specific Gravity	1.55	-	ASTM D 792
Density	1.54	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.02	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.01 - 0.03	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.4 - 0.6	%	ASTM D 955
Wear Factor Washer	25	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.34	-	ASTM D 3702 Modified
Static COF	0.36	-	ASTM D 3702 Modified
Moisture Absorption (23°C / 50% RH)	0.04	%	ISO 62

Processing

Parameter		
Injection Molding	Value	Unit
Drying Temperature	120 - 150	°C
Drying Time	4	hrs
Maximum Moisture Content	0.05	%
Melt Temperature	355 - 370	°C
Front - Zone 3 Temperature	370 - 380	°C
Middle - Zone 2 Temperature	360 - 370	°C
Rear - Zone 1 Temperature	345 - 355	°C
Mold Temperature	140 - 150	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	60 - 100	rpm

Source GMD, last updated:09/18/2008

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.

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- (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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