



LNP™ LUBRICOMP™ Compound JCL36E

Americas: COMMERCIAL

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

Product reorder name: JCL36E

LNP™ LUBRICOMP™ JCL36E is a compound based on Polyethersulfone (PES) resin containing 30% Carbon Fiber, 15% PTFE. Added feature of this grade is: Wear Resistant.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	1440	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	1440	kgf/cm ²	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	274000	kgf/cm ²	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	2020	kgf/cm ²	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	2010	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	238600	kgf/cm ²	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			
Izod Impact, unnotched, 23°C	32	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	5	cm-kgf/cm	ASTM D 256
Instrumented Impact Total Energy, 23°C	54	cm-kgf	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	6	kJ/m ²	ISO 180/1A
THERMAL			
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



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THERMAL			
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			
Specific Gravity	1.55	-	ASTM D 792
Density	1.54	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.02	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.01 - 0.03	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	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



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
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