



LNP™ LUBRICOMP™ Compound LCL33E

Americas: COMMERCIAL

Also known as: LNP™ LUBRICOMP™ Compound LCL-4033 EM

Product reorder name: LCL33E

LNP LUBRICOMP™ LCL33E is a compound based on Polyetheretherketone resin containing 15% Carbon Fiber, 15% PTFE. Added features of this material include: Easy Molding, Wear Resistant.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, break	1830	kgf/cm ²	ASTM D 638
Tensile Strain, break	1.7	%	ASTM D 638
Tensile Modulus, 50 mm/min	169400	kgf/cm ²	ASTM D 638
Flexural Stress	2710	kgf/cm ²	ASTM D 790
Flexural Modulus	132100	kgf/cm ²	ASTM D 790
Tensile Stress, break	187	MPa	ISO 527
Tensile Strain, break	1.6	%	ISO 527
Tensile Modulus, 1 mm/min	14700	MPa	ISO 527
Flexural Stress	275	MPa	ISO 178
Flexural Modulus	14700	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	50	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	6	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	89	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	34	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	>298	°C	ASTM D 648
CTE, -40°C to 40°C, flow	2.37E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	4.17E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	2.36E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	4.17E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	>240	°C	ISO 75/Af



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
PHYSICAL			
Density	1.43	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.07	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.1 - 0.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.4 - 0.7	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.1 - 0.3	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	0.3 - 0.7	%	ISO 294
Wear Factor Washer	13	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.35	-	ASTM D 3702 Modified
Static COF	0.28	-	ASTM D 3702 Modified
Density	1.43	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.7	%	ISO 62
FLAME CHARACTERISTICS			
UL Compliant, 94V-0 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	150	°C
Drying Time	4 - 6	hrs
Front - Zone 3 Temperature	380 - 400	°C
Middle - Zone 2 Temperature	380 - 400	°C
Rear - Zone 1 Temperature	370 - 380	°C
Mold Temperature	175 - 190	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	60 - 100	rpm