LNP™ LUBRICOMP™ COMPOUND LCL33

LCL-4033
REGION EUROPE

DESCRIPTION

LNP LUBRICOMP LCL33 is a compound based on Polyetheretherketone resin containing 15% Carbon Fiber, 15% PTFE. Added features of this material include: Wear Resistant.

TYPICAL PROPERTY VALUES

Revision 20191108

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break, 5 mm/min	162	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.9	%	ISO 527
Tensile Modulus, 1 mm/min	14500	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	223	MPa	ISO 178
Flexural Strain, break, 2 mm/min	2.7	%	ISO 178
Flexural Modulus, 2 mm/min	10700	MPa	ISO 178
Flexural Strain, break, 2 mm/min, 80°C	2.7	%	ISO 178
Flexural Strain, break, 2 mm/min, 120°C	2.7	%	ISO 178
Flexural Strain, break, 2 mm/min, 150°C	6	%	ISO 178
Flexural Strain, break, 2 mm/min, 200°C	6.3	%	ISO 178
Flexural Strain, break, 2 mm/min, 250°C	6.5	%	ISO 178
Flexural Stress, yield, 2 mm/min, 80°C	192	MPa	ISO 178
Flexural Stress, yield, 2 mm/min, 120°C	158	MPa	ISO 178
Flexural Stress, yield, 2 mm/min, 150°C	100	MPa	ISO 178
Flexural Stress, yield, 2 mm/min, 200°C	60	MPa	ISO 178
Flexural Stress, yield, 2 mm/min, 250°C	50	MPa	ISO 178
Flexural Modulus, 2 mm/min, 80°C	10300	MPa	ISO 178
Flexural Modulus, 2 mm/min, 120°C	10200	MPa	ISO 178
Flexural Modulus, 2 mm/min, 150°C	5700	MPa	ISO 178
Flexural Modulus, 2 mm/min, 200°C	3000	MPa	ISO 178
IMPACT			
Izod Impact, unnotched 80*10*4 +23°C	34	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	7	kJ/m²	ISO 180/1A
THERMAL			
CTE, 23°C to 60°C, flow	9.5E-06	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	5.3E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	>300	°C	ISO 75/Af
PHYSICAL			
Wear Factor Washer	17	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.35	-	ASTM D 3702 Modified: Manual
Static COF	0.28	-	ASTM D 3702 Modified: Manual
Density	1.43	g/cm³	ISO 1183
Melt Volume Rate, MVR at 400°C/10.0 kg	6 – 8	cm³/10 min	ISO 1133

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
ELECTRICAL			
Surface Resistivity	1.E+03 – 1.E+05	Ohm	ASTM D 257
INJECTION MOLDING			
Drying Temperature	120 – 150	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.1	%	
Melt Temperature	380 – 390	°C	
Front - Zone 3 Temperature	380 – 395	°C	
Middle - Zone 2 Temperature	365 – 375	°C	
Rear - Zone 1 Temperature	350 – 360	°C	
Mold Temperature	140 – 165	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	60 – 100	rpm	

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