

LNPT[™] LUBRICOMP[™] COMPOUND LCL33EXQ

LCL33EXQ

DESCRIPTION

LNP LUBRICOMP LCL33EXQ compound is based on Polyetheretherketone (PEEK) resin containing 15% carbon fiber, 15% PTFE. Added features of this grade include: Wear Resistant, Easy Molding, Electrically Conductive.

GENERAL INFORMATION	
Features	Electrically Conductive, Good Processability, Wear resistant, Carbon fiber filled, High stiffness/Strength, High temperature resistance
Fillers	Carbon Fiber, PTFE
Polymer Types	Polyetheretherketone (PEEK)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Building and Construction	Building Component
Consumer	Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance
Electrical and Electronics	Mobile Phone - Computer - Tablets
Industrial	Electrical

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, brk, Type I, 5 mm/min	185	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	1.8	%	ASTM D638
Tensile Modulus, 5 mm/min	16000	MPa	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	277	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	13400	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	181	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.6	%	ISO 527
Tensile Modulus, 1 mm/min	13960	MPa	ISO 527
Flexural Stress	276	MPa	ISO 178
Flexural Modulus, 2 mm/min	13530	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, notched, 23°C	69	J/m	ASTM D256
Izod Impact, notched 80*10*4 +23°C	5	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT, 1.82 MPa, 3.2mm, unannealed	320	°C	ASTM D648
PHYSICAL ⁽¹⁾			
Melt Flow Rate, 400°C/5.0 kgf	32	g/10 min	ASTM D1238
Specific Gravity	1.45	-	ASTM D792
Poisson's Ratio	0.43	-	ISO 527-1/2

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Wear Factor Washer	14	10 ⁻¹⁰ in ³ -min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.37	-	ASTM D3702 Modified: Manual
Static COF	0.35	-	ASTM D3702 Modified: Manual
INJECTION MOLDING ⁽²⁾			
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	

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.