LNP™ LUBRICOMP™ COMPOUND LL004C

LL-4040 CCS

DESCRIPTION

LNP LUBRICOMP LL004C compound is based on Polyetheretherketone (PEEK) resin containing 20% PTFE. Added features of this grade include: Wear Resistant, LNP Clean Compounding Technology.

GENERAL INFORMATION	
Features	Wear resistant, Low ionics/Outgassing/Liquid particle count, High temperature resistance
Fillers	Unreinforced, PTFE
Polymer Types	Polyetheretherketone (PEEK)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components, Mobile Phone - Computer - Tablets
Industrial	Electrical, Material Handling

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yield	74	MPa	ASTM D638
Tensile Stress, break	69	MPa	ASTM D638
Tensile Strain, yield	5.8	%	ASTM D638
Tensile Strain, break	23.3	%	ASTM D638
Tensile Modulus, 50 mm/min	2890	MPa	ASTM D638
Flexural Stress	117	MPa	ASTM D790
Flexural Modulus	2960	MPa	ASTM D790
Tensile Stress, yield	73	MPa	ISO 527
Tensile Stress, break	69	MPa	ISO 527
Tensile Strain, yield	5	%	ISO 527
Tensile Strain, break	11.8	%	ISO 527
Tensile Modulus, 1 mm/min	3060	MPa	ISO 527
Flexural Stress	118	MPa	ISO 178
Flexural Modulus	3320	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched, 23°C	1548	J/m	ASTM D4812
Izod Impact, notched, 23°C	96	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	3	J	ASTM D3763
Multiaxial Impact	1	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	91	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	8	kJ/m²	ISO 180/1A
PHYSICAL [1]			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Density	1.37	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.06	%	ASTM D570
Mold Shrinkage, flow, 24 hrs [2]	1.3	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs [2]	1.9	%	ASTM D955
Mold Shrinkage, flow, 24 hrs [2]	1.3	%	ISO 294
Mold Shrinkage, xflow, 24 hrs [2]	1.85	%	ISO 294
Wear Factor Washer	128	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.52	-	ASTM D3702 Modified: Manual
Static COF	0.43	-	ASTM D3702 Modified: Manual
Density	1.37	g/cm³	ISO 1183
INJECTION MOLDING [3]			
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) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

(3) 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.