LNP™ LUBRICOMP™ COMPOUND EX00548C

PDX-E-00548 CCS

DESCRIPTION

LNP LUBRICOMP EX00548C compound is based on Polyetherimide (PEI) resin containing proprietary fillers. Added features of this grade include: LNP Clean Compounding Technology, Wear Resistant.

GENERAL INFORMATION	
Features	Wear resistant, Low ionics/Outgassing/Liquid particle count, High temperature resistance
Fillers	Proprietary Filler
Polymer Types	Polyetherimide (PEI)
Processing Techniques	Injection Molding

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

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yield	85	MPa	ASTM D638
Tensile Stress, break	83	MPa	ASTM D638
Tensile Strain, yield	6.1	%	ASTM D638
Tensile Strain, break	8.1	%	ASTM D638
Tensile Modulus, 50 mm/min	3030	MPa	ASTM D638
Flexural Stress	148	MPa	ASTM D790
Flexural Modulus	3440	MPa	ASTM D790
Tensile Stress, yield	86	MPa	ISO 527
Tensile Stress, break	85	MPa	ISO 527
Tensile Strain, yield	6	%	ISO 527
Tensile Strain, break	7.6	%	ISO 527
Tensile Modulus, 1 mm/min	3200	MPa	ISO 527
Flexural Stress	143	MPa	ISO 178
Flexural Modulus	3390	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched, 23°C	469	J/m	ASTM D4812
Izod Impact, notched, 23°C	26	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	4	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	32	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m²	ISO 180/1A
THERMAL [1]			
HDT, 1.82 MPa, 3.2mm, unannealed	185	°C	ASTM D648

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	184	°C	ISO 75/Af
Relative Temp Index, Elec [2]	105	°C	UL 746B
Relative Temp Index, Mech w/impact [2]	105	°C	UL 746B
Relative Temp Index, Mech w/o impact [2]	105	°C	UL 746B
PHYSICAL [1]			
Density	1.31	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.22	%	ASTM D570
Mold Shrinkage, flow, 24 hrs [3]	0.7	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs [3]	0.7	%	ASTM D955
Mold Shrinkage, flow, 24 hrs [3]	0.66	%	ISO 294
Mold Shrinkage, xflow, 24 hrs [3]	0.7	%	ISO 294
Density	1.31	g/cm³	ISO 1183
FLAME CHARACTERISTICS [2]			
UL Yellow Card Link	E121562-101345280	-	-
UL Yellow Card Link 2	E207780-101345235	-	-
UL Recognized, 94V-0 Flame Class Rating	0.35	mm	UL 94
INJECTION MOLDING [4]			
Drying Temperature	150	°C	
Drying Time	4 – 6	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	360 – 375	°C	
Rear - Zone 1 Temperature	355 – 365	°C	
Middle - Zone 2 Temperature	360 – 370	°C	
Front - Zone 3 Temperature	365 – 375	°C	
Nozzle Temperature	365 – 375	°C	
Mold Temperature	140 – 180	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw speed (Circumferential speed)	0.2 – 0.3	m/s	
Vent Depth	0.025 – 0.076	mm	

(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) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

(3) 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.

(4) 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.

DISCLAIMER