

LNPT[™] THERMOCOMP[™] COMPOUND LX97024

PDX-L-97024

DESCRIPTION

LNP THERMOCOMP LX97024 compound is based on Polyetheretherketone (PEEK) resin containing 15% glass fiber, 5% PTFE. Added features of this grade include: Internally Lubricated, Easy Molding.

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

INDUSTRY	SUB INDUSTRY
Consumer	Commercial Appliance
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, break, 5 mm/min	114	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.3	%	ISO 527
Tensile Modulus, 1 mm/min	6900	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	177	MPa	ISO 178
Flexural Modulus, 2 mm/min	6000	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched 80*10*4 +23°C	30	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
CTE, 23°C to 60°C, flow	2.7E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	5.E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	280	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Density	1.41	g/cm ³	ISO 1183
ELECTRICAL ⁽¹⁾			
Comparative Tracking Index (UL) {PLC}	4	PLC Code	UL 746A
Hot-Wire Ignition (HWI), PLC 0	≥3	mm	UL 746A
Hot-Wire Ignition (HWI), PLC 1	≥1.5	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 4	≥1.5	mm	UL 746A
FLAME CHARACTERISTICS ⁽²⁾			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
UL Yellow Card Link	<u>E45329-101343835</u>	-	-
UL Recognized, 94V-0 Flame Class Rating	≥1.5	mm	UL 94
Glow Wire Ignitability Temperature, 3.0 mm	850	°C	IEC 60695-2-13
Glow Wire Ignitability Temperature, 1.5 mm	825	°C	IEC 60695-2-13
Glow Wire Flammability Index, 3.0 mm	960	°C	IEC 60695-2-12
Glow Wire Flammability Index, 1.5 mm	960	°C	IEC 60695-2-12
INJECTION MOLDING ⁽³⁾			
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	

(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) 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.

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