LNP™ THERMOCOMP™ Compound UX08319

DESCRIPTION

LNP THERMOCOMP UX08319 compound is based on Polyphthalamide (PPA) resin containing 30% glass fiber. Added features of this grade include: Improved Plating Surface and Mechanical Performance targeted for Laser Direct Structuring (LDS) applications, Improved Dielectric Properties.

GENERAL INFORMATION	
Features	Dielectrics, Laser Direct Structuring, High stiffness/Strength, High temperature resistance, No PFAS intentionally added
Fillers	Glass Fiber (Total fluorine >50ppm only from inorganic fluorine)
Polymer Types	Polyphthalamide (PPA)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Interiors
Consumer	Personal Accessory
Electrical and Electronics	Mobile Phone - Computer - Tablets
Industrial	Electrical

TYPICAL PROPERTY VALUES

Revision 20260417

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, brk, Type I, 5 mm/min	125	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	1.4	%	ASTM D638
Tensile Modulus, 5 mm/min	13784	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	185	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	11500	MPa	ASTM D790
IMPACT [1]			
Izod Impact, notched, 23°C	40	J/m	ASTM D256
THERMAL [1]			
HDT, 1.82 MPa, 3.2mm, unannealed	265	°C	ASTM D648
PHYSICAL [1]			
Density	2.14	g/cm³	ASTM D792
Mold Shrinkage, flow [2]	0.33	%	SABIC method
Mold Shrinkage, xflow [2]	0.35	%	SABIC method
ELECTRICAL [1]			
Dielectric Constant			
1.9 GHz	6.2	-	SABIC method
Dissipation Factor			
1.9 GHz	0.015	-	SABIC method
INJECTION MOLDING [3]			
Drying Temperature	120 – 130	°C	

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Drying Time	4 – 6	Hrs	
Melt Temperature	315 – 330	°C	
Front - Zone 3 Temperature	300 – 330	°C	
Middle - Zone 2 Temperature	310 – 330	°C	
Rear - Zone 1 Temperature	300 – 320	°C	
Mold Temperature	140 – 165	°C	
Back Pressure	20 – 40	MPa	
Screw Speed	30 – 70	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.

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