LNP™ THERMOCOMP™ COMPOUND UF0067V

DESCRIPTION

LNP THERMOCOMP UF0067V compound is based on Polyphthalamide (PPA) resin containing 30% glass fiber and available in black color only. Added features of this grade include: Improved Plating Surface and Mechanical Performance suitable for Laser Direct Structuring (LDS) applications, High Heat Resistance, SMT Process capable, Non-Brominated, Non-Chlorinated Flame Retardant.

GENERAL INFORMATION	
Features	Structural, Flame Retardant, Circuit Solution, Non-Brominated, Non-Chlorinated, High Heat Resistance, Laser Direct Structuring, High Stiffness
Fillers	Glass Fiber
Polymer Types	Polyphthalamide (PPA)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Interiors
Consumer	Personal Accessory
Electrical and Electronics	Electrical Devices and Displays, Electrical Components and Infrastructure

TYPICAL PROPERTY VALUES

Revision 20210812

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Modulus, 5 mm/min	9500	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	104	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	1.6	%	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	8500	MPa	ASTM D790
Flexural Stress, yld, 1.3 mm/min, 50 mm span	150	MPa	ASTM D790
IMPACT [1]			
Izod Impact, notched, 23°C	34	J/m	ASTM D256
Izod Impact, unnotched, 23°C	300	J/m	ASTM D4812
THERMAL [1]			
HDT, 0.45 MPa, 3.2 mm	276	°C	ASTM D648
HDT, 1.82 MPa, 3.2 mm	255	°C	ASTM D648
Relative Temp Index, Elec [2]	65	°C	UL 746B
Relative Temp Index, Mech w/impact [2]	65	°C	UL 746B
Relative Temp Index, Mech w/o impact [2]	65	°C	UL 746B
PHYSICAL [1]			
Specific Gravity	1.45	-	ASTM D792
Mold Shrinkage, flow [3]	0.3	%	SABIC method
Mold Shrinkage, xflow [3]	0.5	%	SABIC method
Water Absorption, (23°C/24hrs)	0.05	%	ISO 62-1
ELECTRICAL [1]			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Dielectric Constant, 1.1 GHz	3.560	-	SABIC method
Dissipation Factor, 1.1 GHz	0.009	-	SABIC method
FLAME CHARACTERISTICS [2]			
UL Yellow Card Link	E207780-103351790	-	-
UL Recognized, 94V-0 Flame Class Rating	≥0.4	mm	UL 94
INJECTION MOLDING [4]			
Drying Temperature	120	°C	
Drying Time	4 – 7	Hrs	
Melt Temperature	290 – 330	°C	
Nozzle Temperature	300 – 320	°C	
Front - Zone 3 Temperature	300 – 320	°C	
Middle - Zone 2 Temperature	280 – 300	°C	
Rear - Zone 1 Temperature	260 – 280	°C	
Mold Temperature	120 – 150	°C	

(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