LNP™ THERMOCOMP™ COMPOUND UF004AS

UF-1004 A HS

DESCRIPTION

LNP THERMOCOMP UF004AS compound is based on Polyphthalamide (PPA) resin containing 20% glass fiber. Added features of this grade include: Heat Stabilized.

GENERAL INFORMATION	
Features	Heat Stabilized, High stiffness/Strength, High temperature resistance, No PFAS intentionally added
Fillers	Glass Fiber
Polymer Types	Polyphthalamide (PPA)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Under the Hood
Consumer	Commercial Appliance
Electrical and Electronics	Electronic Components, Mobile Phone - Computer - Tablets
Industrial	Electrical

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, break, 5 mm/min	136	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.7	%	ISO 527
Tensile Modulus, 1 mm/min	7500	MPa	ISO 527
Flexural Stress, break, 2 mm/min	178	MPa	ISO 178
Flexural Modulus, 2 mm/min	7000	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched 80*10*4 +23°C	25	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m²	ISO 180/1A
THERMAL [1]			
CTE, 23°C to 60°C, flow	3.1E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	6.E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	256	°C	ISO 75/Af
PHYSICAL [1]			
Mold Shrinkage on Tensile Bar, flow [2]	0.2 – 0.4	%	SABIC method
Density	1.39	g/cm³	ISO 1183
FLAME CHARACTERISTICS [3]			
UL Yellow Card Link	E45329-101343841	-	-
UL Recognized, 94HB Flame Class Rating	0.75	mm	UL 94
INJECTION MOLDING [4]			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Drying Temperature	120 – 150	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.15	%	
Melt Temperature	315 – 330	°C	
Front - Zone 3 Temperature	325 – 340	°C	
Middle - Zone 2 Temperature	315 – 325	°C	
Rear - Zone 1 Temperature	310 – 320	°C	
Mold Temperature	140 – 165	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	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) 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.

(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