LNP™ THERMOCOMP™ Compound JF004Z

JF-1004 EHV

DESCRIPTION

LNP THERMOCOMP JF004Z compound is based on Polyethersulfone (PES) resin containing 20% glass fiber. Added features of this grade include: High Viscosity, suitable for Extrusion.

GENERAL INFORMATION	
Features	High stiffness/Strength, High temperature resistance, No PFAS intentionally added
Fillers	Glass Fiber (Total fluorine >50ppm only from inorganic fluorine)
Polymer Types	Polyethersulfone (PESU)
Processing Techniques	Injection Molding, Extrusion

INDUSTRY	SUB INDUSTRY
Building and Construction	Building Component
Consumer	Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance
Electrical and Electronics	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	120	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.7	%	ISO 527
Tensile Modulus, 1 mm/min	6700	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	178	MPa	ISO 178
Flexural Modulus, 2 mm/min	5800	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched 80*10*4 +23°C	40	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	7	kJ/m²	ISO 180/1A
THERMAL [1]			
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	225	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	221	°C	ISO 75/Af
PHYSICAL [1]			
Mold Shrinkage on Tensile Bar, flow [2]	0.25 – 0.45	%	SABIC method
Density	1.51	g/cm³	ISO 1183
INJECTION MOLDING [3]			
Drying Temperature	120 – 150	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.05	%	
Melt Temperature	355 – 370	°C	
Front - Zone 3 Temperature	370 – 380	°C	

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Middle - Zone 2 Temperature	360 – 370	°C	
Rear - Zone 1 Temperature	345 – 355	°C	
Mold Temperature	140 – 150	°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) 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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