LNP™ THERMOCOMP™ COMPOUND RB006

RB-1006
REGION EUROPE

DESCRIPTION

LNP THERMOCOMP RB006 compound is based on Nylon 6/6 resin containing 30% glass bead.

GENERAL INFORMATION	
Features	Low Warpage, High stiffness/Strength, No PFAS intentionally added
Fillers	Glass Bead
Polymer Types	Polyamide 66 (Nylon 66)
Processing Techniques	Injection Molding

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	80	MPa	ISO 527
Tensile Strain, break, 5 mm/min	9	%	ISO 527
Tensile Modulus, 1 mm/min	4500	MPa	ISO 527
Flexural Stress, break, 2 mm/min	130	MPa	ISO 178
Flexural Modulus, 2 mm/min	4400	MPa	ISO 178
Hardness, Rockwell L	105	-	ISO 2039-2
IMPACT [1]			
Izod Impact, notched 80*10*4 +23°C	4	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -20°C	3	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -40°C	2	kJ/m²	ISO 180/1A
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	30	kJ/m²	ISO 179/1eU
THERMAL [1]			
CTE, 23°C to 60°C, flow	4.E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	4.E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/120	253	°C	ISO 306
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	235	°C	ISO 75/Be
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	100	°C	ISO 75/Ae
PHYSICAL [1]			
Mold Shrinkage on Tensile Bar, flow [2]	1.1 – 1.5	%	SABIC method

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Density	1.37	g/cm³	ISO 1183
Water Absorption, (23°C/saturated)	5.5	%	ISO 62-1
ELECTRICAL [1]			
Comparative Tracking Index	500	V	IEC 60112
Comparative Tracking Index, M	250	V	IEC 60112
FLAME CHARACTERISTICS			
UL Compliant, 94HB Flame Class Rating [3]	1.6	mm	UL 94 by SABIC-IP
Oxygen Index (LOI)	26	%	ISO 4589
INJECTION MOLDING [4]			
Drying Temperature	75 – 85	°C	
Drying Time	4 – 6	Hrs	
Maximum Moisture Content	0.2	%	
Melt Temperature	260 – 290	°C	
Nozzle Temperature	250 – 270	°C	
Front - Zone 3 Temperature	260 – 280	°C	
Middle - Zone 2 Temperature	260 – 280	°C	
Rear - Zone 1 Temperature	270 – 290	°C	
Hopper Temperature	60 – 80	°C	
Mold Temperature	70 – 120	°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) 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 rating shown here is based on internal measurements.

(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