LNP™ THERMOCOMP™ COMPOUND WX15004L

DESCRIPTION

LNP THERMOCOMP WX15004L is a compound based on Polybutylene Terephthalate + PET (PBT+PET) resin, containing 30% glass fiber. Added features of this material include: Mold Release, Heat Stabilizer. Material is suitable for food contact applications.

GENERAL INFORMATION	
Features	Heat Stabilized, Food contact, Enhanced mold release, High stiffness/Strength, No PFAS intentionally added
Fillers	Glass Fiber
Polymer Types	Polybutylene Terephthalate + PET (PBT+PET)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Consumer	Consumer Goods, Home Appliances
Industrial	Industrial General

TYPICAL PROPERTY VALUES

Revision 20231123

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yield, 5 mm/min	140	MPa	ISO 527
Tensile Stress, break, 5 mm/min	140	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.5	%	ISO 527
Tensile Strain, break, 5 mm/min	2.5	%	ISO 527
Tensile Modulus, 1 mm/min	9000	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	200	MPa	ISO 178
Flexural Modulus, 2 mm/min	8000	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	9	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	8	kJ/m²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	9	kJ/m²	ISO 179/1eA
THERMAL [1]			
CTE, 23°C to 80°C, flow	2.5E-05	1/°C	ISO 11359-2
CTE, 23°C to 80°C, xflow	8.1E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	200	°C	ISO 306
Vicat Softening Temp, Rate B/120	205	°C	ISO 306
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	202	°C	ISO 75/Ae
PHYSICAL [1]			
Moisture absorption (23°C/50% RH)	0.06	%	-
Mold Shrinkage, flow, 3.2 mm [2]	0.3 – 0.8	%	SABIC method
Density	1.54	g/cm³	ISO 1183

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Water Absorption, (23°C/saturated)	0.15	%	ISO 62-1
Melt Volume Rate, MVR at 260°C/2.16 kg	13	cm³/10 min	ISO 1133
INJECTION MOLDING [3]			
Drying Temperature	110 – 120	°C	
Drying Time	4 – 6	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	260 – 285	°C	
Nozzle Temperature	265 – 275	°C	
Front - Zone 3 Temperature	260 – 280	°C	
Middle - Zone 2 Temperature	255 – 280	°C	
Rear - Zone 1 Temperature	240 – 260	°C	
Hopper Temperature	40 – 60	°C	
Mold Temperature	60 – 110	°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) 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