LNP™ THERMOCOMP™ COMPOUND GX94043L

PDX-G-94043

DESCRIPTION

LNP THERMOCOMP GX94043L compound is based on Polysulfone (PSU) resin containing mineral. Added features of this grade include: Low Extractables.

GENERAL INFORMATION	
Features	Food contact, High temperature resistance, No PFAS intentionally added
Fillers	Mineral
Polymer Types	Polysulfone (PSU)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Building and Construction	Water Management
Consumer	Home Appliances
Packaging	Industrial Packaging, Food & Beverage

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yield, 5 mm/min	72	MPa	ISO 527
Tensile Strain, break, 5 mm/min	4.3	%	ISO 527
Tensile Modulus, 1 mm/min	3500	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	119	MPa	ISO 178
Flexural Modulus, 2 mm/min	3800	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched 80*10*4 +23°C	50	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	4.7E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	5.E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	176	°C	ISO 75/Af
PHYSICAL [1]			
Mold Shrinkage, flow, 24 hrs [2]	0.25	%	ISO 294
Mold Shrinkage, xflow, 24 hrs [2]	0.35	%	ISO 294
Density	1.45	g/cm³	ISO 1183
Water Absorption, (23°C/24hrs)	0.28	%	ISO 62-1
INJECTION MOLDING [3]			
Drying Temperature	120 – 150	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.05	%	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Melt Temperature	360 – 370	°C	
Front - Zone 3 Temperature	350 – 360	°C	
Middle - Zone 2 Temperature	340 – 350	°C	
Rear - Zone 1 Temperature	325 – 340	°C	
Mold Temperature	150	°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) 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