

LNPT[™] THERMOCOMP[™] COMPOUND 9X07430

9X07430

DESCRIPTION

LNP THERMOCOMP 9X07430 compound is based on Polycarbonate / Polybutylene Terephthalate (PC/PBT) blend containing glass fiber and talc. Added features of this grade include: Opaque, Weatherable.

GENERAL INFORMATION	
Features	High stiffness/Strength, Weatherable/UV stable, No PFAS intentionally added
Fillers	Glass Fiber, Talc
Polymer Types	Polycarbonate + PBT (PC+PBT)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Exteriors
Building and Construction	Building Component
Consumer	Sport/Leisure
Electrical and Electronics	Mobile Phone - Computer - Tablets
Industrial	Electrical

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, yld, Type I, 5 mm/min	57	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	51	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	2.9	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	4.8	%	ASTM D638
Tensile Modulus, 50 mm/min	3300	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	99	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	3140	MPa	ASTM D790
Tensile Stress, yield, 5 mm/min	60	MPa	ISO 527
Tensile Stress, break, 5 mm/min	56	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	3.1	%	ISO 527
Tensile Strain, break, 5 mm/min	4.9	%	ISO 527
Tensile Modulus, 1 mm/min	3160	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	97	MPa	ISO 178
Flexural Modulus, 2 mm/min	3020	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	715	J/m	ASTM D4812
Izod Impact, notched, 23°C	80	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	9	J	ASTM D3763
Instrumented Dart Impact Energy @ peak, -30°C	3	J	ASTM D3763

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Multiaxial Impact	7	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	14	J	ASTM D3763
Instrumented Dart Impact Total Energy, -30°C	7	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	47	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	8	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT, 1.82 MPa, 3.2mm, unannealed	102	°C	ASTM D648
CTE, -40°C to 40°C, flow	5.7E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	8.3E-05	1/°C	ASTM E831
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	105	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Density	1.31	g/cm ³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.11	%	ASTM D570
Mold Shrinkage, flow ⁽²⁾	0.51	%	SABIC method
Mold Shrinkage, xflow ⁽²⁾	0.59	%	SABIC method
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.5 – 0.51	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	0.58 – 0.59	%	ASTM D955
Density	1.31	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.16	%	ISO 62
INJECTION MOLDING ⁽³⁾			
Drying Temperature	80 – 110	°C	
Drying Time	4 – 6	Hrs	
Drying Time (Cumulative)	24	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	260 – 280	°C	
Nozzle Temperature	260 – 280	°C	
Front - Zone 3 Temperature	260 – 280	°C	
Middle - Zone 2 Temperature	255 – 275	°C	
Rear - Zone 1 Temperature	245 – 270	°C	
Mold Temperature	80 – 110	°C	
Back Pressure	0.3 – 0.7	MPa	

- (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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