

LNPTTM THERMOCOMPTM COMPOUND RF00CSXS

RF-100-12 HS

REGION ASIA

DESCRIPTION

LNP THERMOCOMP RF00CSXS compound is based on Nylon 6/6 resin containing 60% glass fiber. Added features of this grade include: Heat Stabilized.

GENERAL INFORMATION	
Features	Heat Stabilized, High stiffness/Strength, No PFAS intentionally added
Fillers	Glass Fiber
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 20230607

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, break	253	MPa	ASTM D638
Tensile Strain, break	2.2	%	ASTM D638
Tensile Modulus, 50 mm/min	21370	MPa	ASTM D638
Flexural Stress	358	MPa	ASTM D790
Flexural modulus	19300	MPa	ASTM D790
Tensile Stress, break	253	MPa	ISO 527
Tensile Strain, break	2	%	ISO 527
Tensile Modulus, 1 mm/min	20700	MPa	ISO 527
Flexural Stress	375	MPa	ISO 178
Flexural Modulus	20000	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	1228	J/m	ASTM D4812
Izod Impact, notched, 23°C	160	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	10	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	76	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	19	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	260	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	255	°C	ASTM D648
CTE, -40°C to 40°C, flow	1.62E-05	1/°C	ASTM E831

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -40°C to 40°C, xflow	3.78E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, flow	1.6E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	3.8E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	258	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	254	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Density	1.71	g/cm ³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.3	%	ASTM D570
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.3	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	0.4	%	ASTM D955
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.29	%	ISO 294
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	0.44	%	ISO 294
Density	1.71	g/cm ³	ISO 1183
INJECTION MOLDING ⁽³⁾			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.15 – 0.25	%	
Melt Temperature	280 – 305	°C	
Front - Zone 3 Temperature	295 – 305	°C	
Middle - Zone 2 Temperature	280 – 295	°C	
Rear - Zone 1 Temperature	265 – 275	°C	
Mold Temperature	95 – 110	°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.

MORE INFORMATION

For curve data and CAE cards, please visit and register at <https://materialfinder.sabic-specialties.com>

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