LNP™ THERMOCOMP™ COMPOUND RF00CSXZ

RF-100-12 HS

DESCRIPTION

LNP THERMOCOMP RF00CSXZ is a compound based on Recycled Nylon 66 resin containing 60% Glass Fiber. Added features of this material include: Heat Stabilized.

TYPICAL PROPERTY VALUES

Revision 20191213

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield	253	MPa	ASTM D 638
Tensile Stress, break	253	MPa	ASTM D 638
Tensile Strain, yield	2.2	%	ASTM D 638
Tensile Strain, break	2.2	%	ASTM D 638
Tensile Modulus, 50 mm/min	21370	MPa	ASTM D 638
Flexural Stress	358	MPa	ASTM D 790
Flexural Modulus	19300	MPa	ASTM D 790
Tensile Stress, yield	253	MPa	ISO 527
Tensile Stress, break	253	MPa	ISO 527
Tensile Strain, yield	2	%	ISO 527
Tensile Strain, break	2	%	ISO 527
Tensile Modulus, 1 mm/min	21360	MPa	ISO 527
Flexural Stress	375	MPa	ISO 178
Flexural Modulus	20000	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	1228	J/m	ASTM D 4812
Izod Impact, notched, 23°C	160	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	10	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	76	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	19	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	260	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	255	°C	ASTM D 648
CTE, -40°C to 40°C, flow	3.78E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	1.62E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	3.8E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	1.6E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	260	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	254	°C	ISO 75/Af
PHYSICAL			
Density	1.72	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.3	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.4	%	ASTM D 955

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, flow, 24 hrs	0.29	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.44	%	ISO 294
Density	1.72	g/cm³	ISO 1183
INJECTION MOLDING			
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	

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