LNP™ THERMOCOMP™ COMPOUND XF006S

XF-1006 HS

DESCRIPTION

LNP THERMOCOMP XF006S is a compound based on Amorphous Nylon containing 30% Glass Fiber. Added feature of th is grade is: Heat Stabilized.

TYPICAL PROPERTY VALUES

Revision 20191218

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	138	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.6	%	ASTM D 638
Tensile Modulus, 50 mm/min	9650	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	209	MPa	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	208	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	9060	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	141	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.5	%	ISO 527
Tensile Modulus, 1 mm/min	9020	MPa	ISO 527
Flexural Stress	214	MPa	ISO 178
Flexural Modulus, 2 mm/min	8910	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	632	J/m	ASTM D 4812
Izod Impact, notched, 23°C	56	J/m	ASTM D 256
Multiaxial Impact	3	J	ISO 6603
Instrumented Impact Total Energy, 23°C	11	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	38	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	142	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	138	°C	ASTM D 648
CTE, -30°C to 30°C, flow	4.4E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	3.5E-05	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	144	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	137	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.36	-	ASTM D 792
Density	1.36	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.22	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.007 – 0.009	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.2 – 0.4	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.28	%	ISO 62
INJECTION MOLDING			
Drying Temperature	100 – 120	°C	

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Drying Time	6 – 12	hrs	
Maximum Moisture Content	0.1	%	
Melt Temperature	260 – 300	°C	
Front - Zone 3 Temperature	290 – 300	°C	
Middle - Zone 2 Temperature	270 – 290	°C	
Rear - Zone 1 Temperature	260 – 270	°C	
Mold Temperature	50 – 100	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

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