LNP™ THERMOCOMP™ Compound RF007SXN

Americas: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound RF007SXN
Product reorder name: RF007SXN

LNP THERMOCOMP RF007SXN is a Hydro-Stable, 35% Glass Fiber reinforced compound based on Nylon 66. Added features of this grade include: Heat Stabilized, NSF Listed.

TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	1980	kgf/cm²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	1780	kgf/cm²	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.5	%	ASTM D 638
Tensile Modulus, 5 mm/min	120900	kgf/cm²	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	2900	kgf/cm²	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	2890	kgf/cm²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	108000	kgf/cm²	ASTM D 790
Tensile Stress, break, 5 mm/min	193	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.5	%	ISO 527
Tensile Modulus, 1 mm/min	11660	MPa	ISO 527
Flexural Stress	267	MPa	ISO 178
Flexural Modulus, 2 mm/min	9830	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	101	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	10	cm-kgf/cm	ASTM D 256
Multiaxial Impact	30	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	77	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	61	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	10	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	261	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	255	°C	ASTM D 648
CTE, -30°C to 30°C, flow	3.8E-05	1/°C	ASTM D 696

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TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
THERMAL			
CTE, -30°C to 30°C, xflow	6.3E-05	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	261	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	252	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	3.79	-	ASTM D 792
Density	3.78	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.45	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.3 - 0.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	1 - 3	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.51	%	ISO 62

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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
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