LNP™ THERMOCOMP™ Compound RF002ES

Americas: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound RF-1002 EM HS
Product reorder name: RF002ES

LNP THERMOCOMP™ RF002ES is a compound based on Nylon 66 resin containing 10% Glass Fiber. Added features of this material include: Easy Molding, Heat Stabilized.

TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, break	890	kgf/cm²	ASTM D 638
Tensile Strain, break	2.5	%	ASTM D 638
Tensile Modulus, 50 mm/min	49400	kgf/cm²	ASTM D 638
Flexural Stress	1590	kgf/cm²	ASTM D 790
Flexural Modulus	47000	kgf/cm²	ASTM D 790
Tensile Stress, break	90	MPa	ISO 527
Tensile Strain, yield	2.3	%	ISO 527
Tensile Strain, break	2.3	%	ISO 527
Tensile Modulus, 1 mm/min	5120	MPa	ISO 527
Flexural Stress	131	MPa	ISO 178
Flexural Modulus	4280	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	30	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	3	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	47	cm-kgf	ASTM D 3763
Multiaxial Impact	13	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	21	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	3	kJ/m²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	172	°C	ASTM D 648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	175	°C	ISO 75/Af
PHYSICAL			
Density	1.224	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	1.26	%	ASTM D 570

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TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
PHYSICAL			
Mold Shrinkage, flow, 24 hrs (5)	0.8	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.9	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.77	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	0.89	%	ISO 294
Density	1.22	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	1.94	%	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