



LNP™ THERMOCOMP™ Compound RF0039S

Americas: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound RF-1003 FR HS

Product reorder name: RF0039S

LNP THERMOCOMP™ RF0039S is a compound based on Nylon 66 resin containing 15% Glass Fiber, Flame Retardant. Added features of this material include: Flame Retardant, Heat Stabilized.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, break	1020	kgf/cm ²	ASTM D 638
Tensile Strain, break	3	%	ASTM D 638
Tensile Modulus, 50 mm/min	61800	kgf/cm ²	ASTM D 638
Flexural Stress	1630	kgf/cm ²	ASTM D 790
Flexural Modulus	52700	kgf/cm ²	ASTM D 790
Tensile Stress, break	98	MPa	ISO 527
Tensile Strain, break	2.9	%	ISO 527
Tensile Modulus, 1 mm/min	6300	MPa	ISO 527
Flexural Stress	164	MPa	ISO 178
Flexural Modulus	600	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	53	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	4	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	58	cm-kgf	ASTM D 3763
Multiaxial Impact	17	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	38	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	251	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	226	°C	ASTM D 648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	219	°C	ISO 75/Af
PHYSICAL			
Density	1.487	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.49	%	ASTM D 570



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
PHYSICAL			
Mold Shrinkage, flow, 24 hrs (5)	0.9	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	1.3	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.89	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	1.29	%	ISO 294
Density	1.48	g/cm ³	ISO 1183
FLAME CHARACTERISTICS			
UL Compliant, 94V-0 Flame Class Rating (3)(4)	1.7	mm	UL 94 by SABIC-IP



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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	275 - 290	°C
Front - Zone 3 Temperature	295 - 305	°C
Middle - Zone 2 Temperature	280 - 295	°C
Rear - Zone 1 Temperature	265 - 275	°C
Mold Temperature	80 - 95	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm