

## LNP\* Thermocomp\* Compound UF009S

Americas: COMMERCIAL

Also known as: UF-1009 HS  
Product Reorder Name: UF009S

LNP THERMOCOMP\* UF009S is a compound based on Polyphthalamide resin containing Glass Fiber. Added features of this material include: Heat Stabilized.

### Property

TYPICAL PROPERTIES <sup>(1)</sup>			
MECHANICAL	Value	Unit	Standard
Tensile Stress, break	242	MPa	ASTM D 638
Tensile Strain, break	1.7	%	ASTM D 638
Tensile Modulus, 50 mm/min	20350	MPa	ASTM D 638
Flexural Stress	392	MPa	ASTM D 790
Flexural Modulus	18760	MPa	ASTM D 790
Tensile Stress, break	253	MPa	ISO 527
Tensile Strain, break	1.8	%	ISO 527
Tensile Modulus, 1 mm/min	22740	MPa	ISO 527
Flexural Stress	386	MPa	ISO 178
Flexural Modulus	18330	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	1345	J/m	ASTM D 4812
Izod Impact, notched, 23°C	170	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	15	J	ASTM D 3763
Multiaxial Impact	4	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	82	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	14	kJ/m <sup>2</sup>	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 1.82 MPa, 3.2mm, unannealed	258	°C	ASTM D 648
PHYSICAL	Value	Unit	Standard
Density	1.645	g/cm <sup>3</sup>	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.25	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.2	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.5	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.18	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.46	%	ISO 294
Density	1.64	g/cm <sup>3</sup>	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.37	%	ISO 62

Source GMD, last updated:10/02/2004

### Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	120 - 150	°C
Drying Time	4	hrs
Maximum Moisture Content	0.15 - 0.15	%

Melt Temperature	315 - 330	°C
Front - Zone 3 Temperature	325 - 340	°C
Middle - Zone 2 Temperature	315 - 325	°C
Rear - Zone 1 Temperature	310 - 320	°C
Mold Temperature	140 - 165	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

Source GMD, last updated:10/02/2004

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR [\(LOCAL SALES OFFICE\)](#) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.

(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

(4) Internal measurements according to UL standards.

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