

LNP* Thermocomp* Compound PH0800A

Americas: COMMERCIAL

Also known as: HSG-P-0800A
Product Reorder Name: PH0800A

LNP* Thermocomp* PH0800A is a Nylon 6 with High Specific Gravity.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 5 mm/min	54	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	54	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	1	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1	%	ASTM D 638
Tensile Modulus, 50 mm/min	9060	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	86	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	5710	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	54	MPa	ISO 527
Tensile Stress, break, 5 mm/min	54	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	0.8	%	ISO 527
Tensile Strain, break, 5 mm/min	0.8	%	ISO 527
Tensile Modulus, 1 mm/min	8680	MPa	ISO 527
Flexural Stress	81	MPa	ISO 178
Flexural Stress, break, 2 mm/min	81	MPa	ISO 178
Flexural Modulus, 2 mm/min	8340	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	220	J/m	ASTM D 4812
Izod Impact, notched, 23°C	71	J/m	ASTM D 256
Multiaxial Impact	2	J	ISO 6603
Instrumented Impact Total Energy, 23°C	8	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	16	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m ²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	193	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	145	°C	ASTM D 648
CTE, -30°C to 30°C, flow	5.2E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	4.3E-05	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	192	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	132	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Specific Gravity	7.81	-	ASTM D 792
Density	7.79	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.11	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	1 - 3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1 - 3	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.18	%	ISO 62

Source GMD, last updated:09/03/2008

Parameter	Value	Unit
Injection Molding		
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.15 - 0.25	%
Melt Temperature	265 - 270	°C
Front - Zone 3 Temperature	260 - 270	°C
Middle - Zone 2 Temperature	250 - 260	°C
Rear - Zone 1 Temperature	240 - 250	°C
Mold Temperature	80 - 95	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

Source GMD, last updated:09/03/2008

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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