

## LNP\* Thermocomp\* Compound AX04518

Americas: COMMERCIAL

Also known as: THERMOCOMP PDX-A-04518 BK8-115  
Product Reorder Name: AX04518

LNP\* Thermocomp\* AX04518 is an ABS base resin with proprietary fillers.

### Property

TYPICAL PROPERTIES <sup>(1)</sup>			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 5 mm/min	78	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	78	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	1.8	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1.8	%	ASTM D 638
Tensile Modulus, 50 mm/min	6750	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	112	MPa	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	110	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	6260	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	74	MPa	ISO 527
Tensile Stress, break, 5 mm/min	74	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	1.7	%	ISO 527
Tensile Strain, break, 5 mm/min	1.7	%	ISO 527
Tensile Modulus, 1 mm/min	6330	MPa	ISO 527
Flexural Stress	98	MPa	ISO 178
Flexural Modulus, 2 mm/min	5990	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	269	J/m	ASTM D 4812
Izod Impact, notched, 23°C	51	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	15	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m <sup>2</sup>	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	119	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	114	°C	ASTM D 648
CTE, -30°C to 30°C, flow	6.E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	6.9E-05	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	120	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	115	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.21	g/cm <sup>3</sup>	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.67	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.4 - 0.6	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.6 - 0.8	%	ASTM D 955
Density	1.21	g/cm <sup>3</sup>	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.4	%	ISO 62

Parameter	Value	Unit
Injection Molding		
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.05 - 0.1	%
Melt Temperature	260	°C
Front - Zone 3 Temperature	265 - 275	°C
Middle - Zone 2 Temperature	230 - 245	°C
Rear - Zone 1 Temperature	205 - 215	°C
Mold Temperature	70 - 80	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

Source GMD, last updated:11/21/2008

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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