

Product Texts

LNP THERMOCOMP AX04518 compound is based on Acrylonitrile Butadiene Styrene (ABS) resin containing 20% glass fiber.

Processing/Physical Characteristics

	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	0.5	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.7	mm/mm	ASTM D 955

Mechanical properties

	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	6330	MPa	ISO 527
Yield stress	74	MPa	ISO 527
Yield strain	1.7	%	ISO 527
Stress at break	74	MPa	ISO 527
Strain at break	1.7	%	ISO 527
Flexural modulus	5990	MPa	ISO 178
Flexural strength	98	MPa	ISO 178
Izod impact strength, +23°C, 4mm	15	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	5	kJ/m ²	ISO 180/1A

ASTM Data

Tensile Modulus	6750	MPa	ASTM D 638
Tensile Strength at Yield	78	MPa	ASTM D 638
Tensile Strength at Break	78	MPa	ASTM D 638
Elongation at Yield	1.8	%	ASTM D 638
Elongation at Break	1.8	%	ASTM D 638
Flexural Modulus	6260	MPa	ASTM D 790
Izod Impact notched, 1/8 in	51	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	269	J/m	ASTM D 256

Thermal properties

	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	115	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	120	°C	ISO 75-1/-2

ASTM Data

Coefficient of Thermal Expansion, MD	59.9	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	68.9	E-6/K	ASTM D 696
DTUL @ 66 psi	119	°C	ASTM D 648
DTUL @ 264 psi	114	°C	ASTM D 648

Other properties

	Value	Unit	Test Standard
Humidity absorption	0.4	%	Sim. to ISO 62
Density	1210	kg/m ³	ISO 1183
Water Absorption, 24hr	0.67	%	ASTM D 570
Density	1210	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding

	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.1	%	-
Melt temperature	260	°C	-
Mold temperature	70 - 80	°C	-
Zone 1	205 - 215	°C	-
Zone 2	230 - 245	°C	-
Zone 3	265 - 275	°C	-
Screw speed	30 - 60	rpm	-
Back pressure	0.2 - 0.3	MPa	-

Characteristics

Processing

Injection Molding

Regional Availability

North America, Europe, Asia Pacific