

Product Texts

LNP THERMOCOMP AB002 compound is based on Acrylonitrile Butadiene Styrene (ABS) resin containing 10% glass bead.

Processing/Physical Characteristics

	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	0.7	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.9	mm/mm	ASTM D 955

Mechanical properties

	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2600	MPa	ISO 527
Yield stress	34	MPa	ISO 527
Yield strain	2.2	%	ISO 527
Stress at break	30	MPa	ISO 527
Strain at break	24	%	ISO 527
Flexural modulus	2410	MPa	ISO 178
Flexural strength	60	MPa	ISO 178
Izod impact strength, +23°C, 4mm	34	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	10	kJ/m ²	ISO 180/1A

ASTM Data

Tensile Modulus	2650	MPa	ASTM D 638
Tensile Strength at Yield	35	MPa	ASTM D 638
Tensile Strength at Break	32	MPa	ASTM D 638
Elongation at Yield	2.3	%	ASTM D 638
Elongation at Break	29	%	ASTM D 638
Flexural Modulus	2590	MPa	ASTM D 790
Izod Impact notched, 1/8 in	120	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	600	J/m	ASTM D 256

Thermal properties

	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	79	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	92	°C	ISO 75-1/-2

ASTM Data

Coefficient of Thermal Expansion, MD	86.9	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	88.9	E-6/K	ASTM D 696
DTUL @ 66 psi	93	°C	ASTM D 648
DTUL @ 264 psi	81	°C	ASTM D 648

Other properties

	Value	Unit	Test Standard
Humidity absorption	0.36	%	Sim. to ISO 62
Density	1110	kg/m ³	ISO 1183
Water Absorption, 24hr	0.22	%	ASTM D 570
Density	1120	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