

Product Texts

LNP THERMOCOMP DF002H compound is based on Polycarbonate (PC) resin containing 10% glass fiber. Added features of this grade include: Healthcare.

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	4170	MPa	ISO 527
Yield stress	80	MPa	ISO 527
Yield strain	3.8	%	ISO 527
Stress at break	74	MPa	ISO 527
Strain at break	5.7	%	ISO 527
Flexural modulus	3950	MPa	ISO 178
Izod impact strength, +23°C, 4mm	54	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	8	kJ/m ²	ISO 180/1A

ASTM Data	Value	Unit	Test Standard
Tensile Modulus	4250	MPa	ASTM D 638
Tensile Strength at Yield	81	MPa	ASTM D 638
Tensile Strength at Break	75	MPa	ASTM D 638
Elongation at Yield	3.9	%	ASTM D 638
Elongation at Break	5.6	%	ASTM D 638
Flexural Modulus	4110	MPa	ASTM D 790
Izod Impact notched, 1/8 in	81	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	883	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	141	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	146	°C	ISO 75-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	46.1	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	52.9	E-6/K	ASTM D 696
DTUL @ 66 psi	146	°C	ASTM D 648
DTUL @ 264 psi	141	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Humidity absorption	0.2	%	Sim. to ISO 62
Density	1290	kg/m ³	ISO 1183
Water Absorption, 24hr	0.14	%	ASTM D 570
Density	1290	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	305 - 325	°C	-
Mold temperature	80 - 110	°C	-
Zone 1	295 - 305	°C	-
Zone 2	310 - 320	°C	-
Zone 3	320 - 330	°C	-
Screw speed	30 - 60	rpm	-
Back pressure	0.2 - 0.3	MPa	-

Characteristics

Processing

Injection Molding

Regional Availability

North America, Europe, Asia Pacific