

Product Texts

LNP THERMOCOMP UC006H compound is based on Polyphthalamide (PPA) resin containing 30% carbon fiber. Added features of this grade include: Electrically Conductive, Healthcare.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.2	%	ISO 294-4, 2577
Molding shrinkage, normal	0.6	%	ISO 294-4, 2577
ASTM Data			
Mold Shrinkage, MD	0.2	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.6	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	28200	MPa	ISO 527
Stress at break	263	MPa	ISO 527
Strain at break	1.3	%	ISO 527
Flexural modulus	22300	MPa	ISO 178
Flexural strength	413	MPa	ISO 178
Izod impact strength, +23°C, 4mm	51	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	6	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	26110	MPa	ASTM D 638
Tensile Strength at Break	287	MPa	ASTM D 638
Elongation at Break	1.5	%	ASTM D 638
Flexural Modulus	22630	MPa	ASTM D 790
Flexural Strength	419	MPa	ASTM D 790
Izod Impact notched, 1/8 in	74	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	827	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ASTM Data			
DTUL @ 264 psi	285	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Humidity absorption	0.66	%	Sim. to ISO 62
Density	1320	kg/m ³	ISO 1183
Water Absorption, 24hr	0.31	%	ASTM D 570
Density	1320	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120 - 150	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.15	%	-
Melt temperature	315 - 330	°C	-
Mold temperature	140 - 165	°C	-
Zone 1	310 - 320	°C	-
Zone 2	315 - 325	°C	-
Zone 3	325 - 340	°C	-
Screw speed	30 - 60	rpm	-
Back pressure	0.2 - 0.3	MPa	-

Characteristics**Processing**

Injection Molding

Regional Availability

North America, Europe, Asia Pacific

Special Characteristics

Increased electrical conductivity