

Product Texts

LNP THERMOCOMP UC008H compound is based on Polyphthalamide (PPA) resin containing 40% carbon fiber. Added features of this grade include: Electrically Conductive, Healthcare.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.8	%	ISO 294-4, 2577
Molding shrinkage, normal	0.8	%	ISO 294-4, 2577
ASTM Data			
Mold Shrinkage, MD	0.8	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.8	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	35500	MPa	ISO 527
Stress at break	232	MPa	ISO 527
Strain at break	1.3	%	ISO 527
Flexural modulus	26600	MPa	ISO 178
Flexural strength	425	MPa	ISO 178
Izod impact strength, +23°C, 4mm	45	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	7	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	33780	MPa	ASTM D 638
Tensile Strength at Break	261	MPa	ASTM D 638
Elongation at Break	1	%	ASTM D 638
Flexural Modulus	26820	MPa	ASTM D 790
Flexural Strength	441	MPa	ASTM D 790
Izod Impact notched, 1/8 in	58	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	328	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	250	°C	ISO 75-1/-2
ASTM Data			
DTUL @ 264 psi	248	°C	ASTM D 648

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Surface Resistivity	10000	Ohm	ASTM D 257
Volume Resistivity	10000	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Humidity absorption	0.8	%	Sim. to ISO 62
Water Absorption, 24hr	0.4	%	ASTM D 570
Density	1380	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