

Product Texts

LNP THERMOCOMP WC006 compound is based on Polybutylene Terephthalate (PBT) resin containing 30% carbon fiber. Added features of this grade include: Electrically Conductive.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.2	%	ISO 294-4, 2577
Molding shrinkage, normal	1.2	%	ISO 294-4, 2577
ASTM Data			
Mold Shrinkage, MD	0.2	mm/mm	ASTM D 955
Mold Shrinkage, TD	1.5	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	20700	MPa	ISO 527
Yield stress	158	MPa	ISO 527
Yield strain	1.2	%	ISO 527
Stress at break	158	MPa	ISO 527
Strain at break	1.2	%	ISO 527
Flexural modulus	17000	MPa	ISO 178
Flexural strength	219	MPa	ISO 178
Izod impact strength, +23°C, 4mm	30	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	4	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	19990	MPa	ASTM D 638
Tensile Strength at Yield	158	MPa	ASTM D 638
Tensile Strength at Break	158	MPa	ASTM D 638
Elongation at Yield	1.2	%	ASTM D 638
Elongation at Break	1.2	%	ASTM D 638
Flexural Modulus	15160	MPa	ASTM D 790
Flexural Strength	206	MPa	ASTM D 790
Izod Impact notched, 1/8 in	42	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	464	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	209	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	223	°C	ISO 75-1/-2
ASTM Data			
DTUL @ 66 psi	222	°C	ASTM D 648
DTUL @ 264 psi	211	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Density	1430	kg/m ³	ISO 1183
Density	1430	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	≤0.05	%	-
Melt temperature	240 - 265	°C	-
Mold temperature	80 - 100	°C	-
Zone 1	220 - 230	°C	-
Zone 2	245 - 255	°C	-
Zone 3	260 - 270	°C	-
Screw speed	30 - 60	rpm	-
Back pressure	0.2 - 0.3	MPa	-

Characteristics

Processing

Injection Molding

Regional Availability

North America

Special Characteristics

Increased electrical conductivity