

Product Texts

LNP THERMOCOMP WF006XXB compound is based on Polybutylene Terephthalate (PBT) resin containing 30% glass fiber. Added features of this grade include: Medium Flow, Healthcare, Low Extractables, Biocompatible (ISO10993 or USP Class VI).

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	13	cm ³ /10min	ISO 1133
Temperature	250	°C	-
Load	2.16	kg	-
ASTM Data			
Melt Flow Index, MFI	17	g/10min	ASTM D 1238
Temperature	250	°C	-
Load	2.16	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	9300	MPa	ISO 527
Yield stress	125	MPa	ISO 527
Yield strain	2	%	ISO 527
Stress at break	125	MPa	ISO 527
Strain at break	2	%	ISO 527
Flexural modulus	8500	MPa	ISO 178
Charpy notched impact strength, +23°C	5	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C, 4mm	45	kJ/m ²	ISO 180/1U
Izod impact strength, -30°C, 4mm	45	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	8	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	7	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	9300	MPa	ASTM D 638
Tensile Strength at Yield	120	MPa	ASTM D 638
Tensile Strength at Break	120	MPa	ASTM D 638
Elongation at Yield	3	%	ASTM D 638
Elongation at Break	3	%	ASTM D 638
Flexural Modulus	7580	MPa	ASTM D 790
Rockwell Hardness	R 118	-	ASTM D 785
Izod Impact notched, 1/8 in	85	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	80	J/m	ASTM D 256
Temperature	-30	°C	-
Izod Impact unnotched, 1/8 in	801	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	200	°C	ISO 75-1/-2
Vicat softening temperature, B	215	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	220	°C	ISO 306
ASTM Data			
Vicat Temperature	215	°C	ASTM D 1525

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Dielectric Strength, Short Time	24.8	kV/mm	ASTM D 149
Dissipation Factor, 1 MHz	0.02	-	ASTM D 150
Dielectric Constant, 1 MHz	3.7	-	ASTM D 150
Volume Resistivity	>1E15	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Water absorption	0.26	%	Sim. to ISO 62
Humidity absorption	0.06	%	Sim. to ISO 62
Density	1530	kg/m ³	ISO 1183

Density	1530	kg/m ³	ASTM D 792
---------	-------------	-------------------	------------

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	3 - 4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	250 - 265	°C	-
Mold temperature	65 - 90	°C	-
Zone 1	240 - 255	°C	-
Zone 2	245 - 260	°C	-
Zone 3	250 - 265	°C	-
Screw speed	50 - 80	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics**Processing**

Injection Molding

Regional Availability

North America, Europe, Asia Pacific