

**Product Texts**

LNP THERMOCOMP WX05502 compound is based on Polybutylene Terephthalate (PBT) resin containing 45% glass fiber/mineral. Added features of this grade include: Flame Retardant.

UL Yellow Card Link [E207780-101283806](https://www.ulprospector.com/usa/Products/Plastics/PBT/101283806)

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ASTM Data</b>			
Mold Shrinkage, MD	0.4	mm/mm	ASTM D 955
Mold Shrinkage, TD	2	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	11700	MPa	ISO 527
Yield strain	1.2	%	ISO 527
Stress at break	85	MPa	ISO 527
Strain at break	1.2	%	ISO 527
Flexural modulus	11400	MPa	ISO 178
Flexural strength	142	MPa	ISO 178
Izod impact strength, +23°C, 4mm	22	kJ/m <sup>2</sup>	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	4	kJ/m <sup>2</sup>	ISO 180/1A
<b>ASTM Data</b>			
Tensile Modulus	13240	MPa	ASTM D 638
Tensile Strength at Break	90	MPa	ASTM D 638
Elongation at Break	1.4	%	ASTM D 638
Flexural Modulus	10900	MPa	ASTM D 790
Izod Impact notched, 1/8 in	18	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	337	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Temp. of deflection under load, 1.80 MPa	197	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	217	°C	ISO 75-1/-2
Burning behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	0.8	mm	-
<b>ASTM Data</b>			
Coefficient of Thermal Expansion, MD	21.1	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	50	E-6/K	ASTM D 696
DTUL @ 66 psi	221	°C	ASTM D 648
DTUL @ 264 psi	205	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Humidity absorption	0.03	%	Sim. to ISO 62
Water Absorption, 24hr	0.02	%	ASTM D 570
Density	1810	kg/m <sup>3</sup>	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120 - 150	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	250 - 275	°C	-
Mold temperature	80 - 95	°C	-
Zone 1	230 - 245	°C	-
Zone 2	250 - 260	°C	-
Zone 3	265 - 275	°C	-
Screw speed	30 - 60	rpm	-
Back pressure	0.2 - 0.3	MPa	-

**Characteristics**

**Processing**

Injection Molding

**Special Characteristics**

Flame retardant

**Additives**

Flame retarding agent

**Regional Availability**

North America, Europe, Asia Pacific