

Product Texts

LNP THERMOCOMP WX05456 compound is based on Polybutylene Terephthalate (PBT) resin containing mineral. Added features of this grade include: Low Warpage, Flame Retardant.

UL Yellow Card Link [E121562-101283790](https://www.ul.com/yellowcard/E121562-101283790)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	1.5	%	ISO 294-4, 2577
Molding shrinkage, normal	1.5	%	ISO 294-4, 2577
ASTM Data			
Mold Shrinkage, MD	1.5	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	4650	MPa	ISO 527
Stress at break	47	MPa	ISO 527
Strain at break	1.4	%	ISO 527
Flexural modulus	4200	MPa	ISO 178
Flexural strength	88	MPa	ISO 178
Izod impact strength, +23°C, 4mm	15	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	2	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	4220	MPa	ASTM D 638
Tensile Strength at Break	48	MPa	ASTM D 638
Elongation at Break	1.8	%	ASTM D 638
Flexural Modulus	4390	MPa	ASTM D 790
Flexural Strength	90	MPa	ASTM D 790
Izod Impact notched, 1/8 in	26	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	197	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	82	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	163	°C	ISO 75-1/-2
Burning behav. at 1.5 mm nom. thickn. Thickness tested	V-0 1.5	class mm	IEC 60695-11-10 -
ASTM Data			
DTUL @ 66 psi	171	°C	ASTM D 648
DTUL @ 264 psi	71	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Humidity absorption	0.07	%	Sim. to ISO 62
Density	1540	kg/m ³	ISO 1183
Water Absorption, 24hr	0.05	%	ASTM D 570
Density	1550	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	≤0.02	%	-
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