LNP™ THERMOCOMP™ Compound WFB62

PBT-(GF+GB) — Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP THERMOCOMP WFB62 compound is based on Polybutylene Terephthalate (PBT) resin containing 10% glass fiber, 30% glass bead. Added features of this grade include: Low Warpage.

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	**2**	mm/mm	ASTM D 955
Mold Shrinkage, TD	**2**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**6150**	MPa	ISO 527
Yield stress	**77**	MPa	ISO 527
Yield strain	**3**	%	ISO 527
Stress at break	**76**	MPa	ISO 527
Strain at break	**3**	%	ISO 527
Flexural modulus	**5670**	MPa	ISO 178
Flexural strength	**126**	MPa	ISO 178
Izod impact strength, +23°C, 4mm	**17**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**3**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**6060**	MPa	ASTM D 638
Tensile Strength at Yield	**77**	MPa	ASTM D 638
Tensile Strength at Break	**76**	MPa	ASTM D 638
Elongation at Yield	**3**	%	ASTM D 638
Elongation at Break	**3**	%	ASTM D 638
Flexural Modulus	**5730**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**30**	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	**277**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**167**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**207**	°C	ISO 75-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	**50.9**	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	**59**	E-6/K	ASTM D 696
DTUL @ 66 psi	**216**	°C	ASTM D 648
DTUL @ 264 psi	**185**	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Humidity absorption	**0.05**	%	Sim. to ISO 62
Water Absorption, 24hr	**0.03**	%	ASTM D 570
Density	**1600**	kg/m³	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, Europe, Asia Pacific