LNP™ THERMOCOMP™ Compound WF004 - Americas

PBT-GF20 — Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP THERMOCOMP WF004 compound is based on Polybutylene Terephthalate (PBT) resin containing 20% glass fiber.

UL Yellow Card Link E121562-101284452

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
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
ISO Data			
Tensile Modulus	**7590**	MPa	ISO 527
Yield strain	**2.4**	%	ISO 527
Stress at break	**114**	MPa	ISO 527
Strain at break	**2.4**	%	ISO 527
Flexural modulus	**6660**	MPa	ISO 178
Flexural strength	**173**	MPa	ISO 178
Izod impact strength, +23°C, 4mm	**35**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**6**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**7580**	MPa	ASTM D 638
Tensile Strength at Break	**117**	MPa	ASTM D 638
Elongation at Break	**2.7**	%	ASTM D 638
Flexural Modulus	**7110**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**60**	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	**601**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**198**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**219**	°C	ISO 75-1/-2
Burning behav. at 1.5 mm nom. thickn.	**HB**	class	IEC 60695-11-10
Thickness tested	**1.5**	mm	-
ASTM Data			
Coefficient of Thermal Expansion, MD	**39.1**	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	**102**	E-6/K	ASTM D 696
DTUL @ 66 psi	**222**	°C	ASTM D 648
DTUL @ 264 psi	**207**	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Humidity absorption	**0.07**	%	Sim. to ISO 62
Water Absorption, 24hr	**0.05**	%	ASTM D 570
Density	**1470**	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

Applications
Automotive

Regional Availability
North America