

LNP™ THERMOCOMP™ Compound ZF004 - Americas

(PPE+PS)-GF20

Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP THERMOCOMP ZF004 compound is based on Polyphenylene Ether / Polystyrene (PPE/PS) blend containing 20% glass fiber.

Processing/Physical Characteristics

	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	0.2	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.4	mm/mm	ASTM D 955

Mechanical properties

	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	6350	MPa	ISO 527
Stress at break	79	MPa	ISO 527
Strain at break	2	%	ISO 527
Flexural modulus	6270	MPa	ISO 178
Flexural strength	121	MPa	ISO 178
Izod impact strength, +23°C, 4mm	31	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	9	kJ/m ²	ISO 180/1A

ASTM Data

Tensile Modulus	6570	MPa	ASTM D 638
Tensile Strength at Break	80	MPa	ASTM D 638
Elongation at Break	1.8	%	ASTM D 638
Flexural Modulus	6410	MPa	ASTM D 790
Izod Impact notched, 1/8 in	69	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	390	J/m	ASTM D 256

Thermal properties

	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	133	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	137	°C	ISO 75-1/-2

ASTM Data

Coefficient of Thermal Expansion, MD	54	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	68	E-6/K	ASTM D 696
DTUL @ 66 psi	138	°C	ASTM D 648
DTUL @ 264 psi	131	°C	ASTM D 648

Other properties

	Value	Unit	Test Standard
Humidity absorption	0.09	%	Sim. to ISO 62
Density	1220	kg/m ³	ISO 1183
Water Absorption, 24hr	0.09	%	ASTM D 570
Density	1220	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding

	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	4	h	-
Melt temperature	300 - 305	°C	-
Mold temperature	80 - 110	°C	-
Zone 1	275 - 290	°C	-
Zone 2	290 - 300	°C	-
Zone 3	300 - 310	°C	-
Screw speed	30 - 60	rpm	-
Back pressure	0.2 - 0.3	MPa	-

Characteristics**Processing**

Injection Molding

Regional Availability

North America