

LNP™ THERMOCOMP™ Compound PDXE00715EES

PEI-GF10

Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP THERMOCOMP PDXE00715EES compound is based on Polyetherimide (PEI) resin containing 10% glass fiber. Added features of this grade include: Healthcare.

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	2.3	mm/mm	ASTM D 955
Mold Shrinkage, TD	2.4	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	4990	MPa	ISO 527
Yield stress	127	MPa	ISO 527
Yield strain	4.5	%	ISO 527
Stress at break	123	MPa	ISO 527
Strain at break	5.8	%	ISO 527
Flexural modulus	5080	MPa	ISO 178
Flexural strength	202	MPa	ISO 178
Izod impact strength, +23°C, 4mm	37.2	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	5.2	kJ/m ²	ISO 180/1A

ASTM Data			
Tensile Modulus	5022	MPa	ASTM D 638
Tensile Strength at Yield	129	MPa	ASTM D 638
Tensile Strength at Break	129	MPa	ASTM D 638
Elongation at Yield	4.7	%	ASTM D 638
Elongation at Break	6	%	ASTM D 638
Flexural Modulus	5090	MPa	ASTM D 790
Izod Impact notched, 1/8 in	52.9	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	687	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	205	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	213	°C	ISO 75-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	32	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	46.1	E-6/K	ASTM D 696
DTUL @ 66 psi	211	°C	ASTM D 648
DTUL @ 264 psi	205	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Humidity absorption	0.29	%	Sim. to ISO 62
Water Absorption, 24hr	0.17	%	ASTM D 570
Density	1360	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	121	°C	-
Processing humidity	≤0.02	%	-
Melt temperature	360 - 365	°C	-
Mold temperature	121 - 148	°C	-
Zone 1	343 - 354	°C	-
Zone 2	354 - 365	°C	-
Zone 3	365 - 376	°C	-
Screw speed	60 - 100	rpm	-
Back pressure	0.34 - 0.68	MPa	-

Characteristics

Processing

Injection Molding

Regional Availability

North America, Europe, Asia Pacific