LNP™ THERMOCOMP™ Compound EX93452 - Americas

PEI-CF20 — Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP THERMOCOMP EX93452 compound is based on Polyetherimide (PEI) resin containing 20% carbon fiber. Added features of this grade include: Electrically Conductive.

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	**0.3**	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	**18500**	MPa	ISO 527
Stress at break	**205**	MPa	ISO 527
Strain at break	**1.4**	%	ISO 527
Flexural modulus	**17100**	MPa	ISO 178
Izod impact strength, +23°C, 4mm	**29**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**5**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**19860**	MPa	ASTM D 638
Tensile Strength at Break	**214**	MPa	ASTM D 638
Elongation at Break	**1.5**	%	ASTM D 638
Flexural Modulus	**16500**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**52**	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	**467**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**214**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**219**	°C	ISO 75-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	**27**	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	**29**	E-6/K	ASTM D 696
DTUL @ 66 psi	**219**	°C	ASTM D 648
DTUL @ 264 psi	**214**	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Humidity absorption	**0.24**	%	Sim. to ISO 62
Water Absorption, 24hr	**0.14**	%	ASTM D 570
Density	**1390**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**150**	°C	-
Pre-drying - Time	**4 - 6**	h	-
Processing humidity	**≤0.02**	%	-
Melt temperature	**360 - 400**	°C	-
Mold temperature	**140 - 180**	°C	-
Zone 1	**360 - 380**	°C	-
Zone 2	**370 - 390**	°C	-
Zone 3	**380 - 400**	°C	-
Back pressure	**0.3 - 0.7**	MPa	-

Characteristics

Processing

Injection Molding

Applications

Automotive

Special Characteristics
Increased electrical conductivity

Regional Availability
North America