LNP™ THERMOCOMP™ Compound LX08411

PEEK-CF45 — Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP THERMOCOMP LX08411 compound is based on Polyetheretherketone (PEEK) resin containing 45% carbon fiber. Added features of this grade include: Electrically Conductive, High Modulus, Easy Molding.

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	**0.24**	mm/mm	ASTM D 955
Mold Shrinkage, TD	**0.8**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ASTM Data			
Tensile Modulus	**23510**	MPa	ASTM D 638
Tensile Strength at Yield	**270**	MPa	ASTM D 638
Tensile Strength at Break	**270**	MPa	ASTM D 638
Elongation at Yield	**1.8**	%	ASTM D 638
Elongation at Break	**1.8**	%	ASTM D 638
Flexural Modulus	**25000**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**70**	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	**775**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ASTM Data			
DTUL @ 66 psi	**341**	°C	ASTM D 648
DTUL @ 264 psi	**327**	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Water Absorption, 24hr	**0.03**	%	ASTM D 570
Density	**1450**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**150**	°C	-
Pre-drying - Time	**4 - 6**	h	-
Mold temperature	**175 - 190**	°C	-
Zone 1	**370 - 380**	°C	-
Zone 2	**380 - 400**	°C	-
Zone 3	**380 - 400**	°C	-
Screw speed	**60 - 100**	rpm	-
Back pressure	**0.3 - 0.7**	MPa	-

Characteristics

Processing

Injection Molding

Regional Availability

North America, Europe, Asia Pacific

Special Characteristics

Increased electrical conductivity