LNP™ THERMOCOMP™ Compound EC008PXQ

PEI-CF40 — Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP THERMOCOMP EC008PXQ compound is based on Polyetherimide (PEI) resin containing 40% carbon fiber. Added features of this grade include: Electrically Conductive, Exceptional Processing, FAR25.853 Compliant.

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Melt Flow Index, MFI	**15**	g/10min	ASTM D 1238
Temperature	**380**	°C	-
Load	**6.7**	kg	-
Mold Shrinkage, MD	**0.2**	mm/mm	ASTM D 955
Mold Shrinkage, TD	**0.3**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**35500**	MPa	ISO 527
Stress at break	**247**	MPa	ISO 527
Strain at break	**0.9**	%	ISO 527
Flexural modulus	**30600**	MPa	ISO 178
Izod impact strength, +23°C, 4mm	**33**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**6**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**38600**	MPa	ASTM D 638
Tensile Strength at Break	**272**	MPa	ASTM D 638
Elongation at Break	**1**	%	ASTM D 638
Flexural Modulus	**32600**	MPa	ASTM D 790
Rockwell Hardness	**M 112**	-	ASTM D 785
Izod Impact notched, 1/8 in	**74**	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	**597**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ASTM Data			
DTUL @ 264 psi	**193**	°C	ASTM D 648

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Surface Resistivity	**4100**	Ohm	ASTM D 257
Volume Resistivity	**450**	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Water Absorption, 24hr	**0.11**	%	ASTM D 570
Density	**1440**	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, Europe, Asia Pacific