LNP™ THERMOTUF™ Compound PX06417

PA6-GF40 — Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP THERMOTUF PX06417 compound is based on Nylon 6 resin containing 40% glass fiber. Added features of this grade include: Heat Stabilized, Impact Modified.

UL Yellow Card Link E121562-101281614

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	**0.2**	%	ISO 294-4, 2577
Molding shrinkage, normal	**0.9**	%	ISO 294-4, 2577
ASTM Data			
Mold Shrinkage, MD	**0.2**	mm/mm	ASTM D 955
Mold Shrinkage, TD	**0.9**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**11400**	MPa	ISO 527
Stress at break	**147**	MPa	ISO 527
Strain at break	**2.9**	%	ISO 527
Flexural modulus	**11000**	MPa	ISO 178
Flexural strength	**243**	MPa	ISO 178
Izod impact strength, +23°C, 4mm	**70**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**15**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**12820**	MPa	ASTM D 638
Tensile Strength at Break	**152**	MPa	ASTM D 638
Elongation at Break	**2.4**	%	ASTM D 638
Flexural Modulus	**8960**	MPa	ASTM D 790
Flexural Strength	**228**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**149**	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	**1090**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**207**	°C	ISO 75-1/-2
Burning behav. at 1.5 mm nom. thickn.	**HB**	class	IEC 60695-11-10
Thickness tested	**1.5**	mm	-
ASTM Data			
DTUL @ 66 psi	**220**	°C	ASTM D 648
DTUL @ 264 psi	**208**	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Humidity absorption	**1.02**	%	Sim. to ISO 62
Density	**1460**	kg/m³	ISO 1183
Water Absorption, 24hr	**0.64**	%	ASTM D 570
Density	**1460**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**80**	°C	-
Pre-drying - Time	**4**	h	-
Processing humidity	**≤0.25**	%	-
Melt temperature	**265 - 275**	°C	-
Mold temperature	**80 - 95**	°C	-
Zone 1	**250 - 260**	°C	-
Zone 2	**265 - 275**	°C	-
Zone 3	**275 - 290**	°C	-
Screw speed	**30 - 60**	rpm	-
Back pressure	**0.3 - 0.7**	MPa	-

Characteristics

Processing
Injection Molding

Special Characteristics
High impact or impact modified

Regional Availability
North America, Europe, Asia Pacific