LNP™ THERMOTUF™ Compound RF006I

PA66-GF30 — Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP THERMOTUF RF006I compound is based on Nylon 6/6 resin containing 30% glass fiber. Added features of this grade include: Impact Modified.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	**0.3**	%	ISO 294-4, 2577
Molding shrinkage, normal	**1.1**	%	ISO 294-4, 2577
ASTM Data			
Mold Shrinkage, MD	**0.3**	mm/mm	ASTM D 955
Mold Shrinkage, TD	**1.1**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**10800**	MPa	ISO 527
Stress at break	**179**	MPa	ISO 527
Strain at break	**2.9**	%	ISO 527
Flexural modulus	**9480**	MPa	ISO 178
Flexural strength	**266**	MPa	ISO 178
Izod impact strength, +23°C, 4mm	**75**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**14**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**10410**	MPa	ASTM D 638
Tensile Strength at Break	**161**	MPa	ASTM D 638
Elongation at Break	**3.2**	%	ASTM D 638
Flexural Modulus	**8680**	MPa	ASTM D 790
Flexural Strength	**248**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**117**	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	**1120**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ASTM Data			
DTUL @ 66 psi	**259**	°C	ASTM D 648
DTUL @ 264 psi	**121**	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Density	**1370**	kg/m³	ISO 1183
Water Absorption, 24hr	**0.63**	%	ASTM D 570
Density	**1380**	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	**280 - 305**	°C	-
Mold temperature	**95 - 110**	°C	-
Zone 1	**265 - 275**	°C	-
Zone 2	**280 - 295**	°C	-
Zone 3	**295 - 305**	°C	-
Screw speed	**30 - 60**	rpm	-
Back pressure	**0.2 - 0.3**	MPa	-

Characteristics

Processing

Injection Molding

Regional Availability

North America, Europe, Asia Pacific

Special Characteristics
High impact or impact modified