LNP™ THERMOTUF™ Compound WF009N

PBT-GF45 — Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP THERMOTUF WF009N compound is based on Polybutylene Terephthalate (PBT) resin containing 45% glass fiber. Added features of this grade include: Impact Modified, Good Metal Bonding Strength and Good Chemical Resistance suitable for Nano-Molding Technology (NMT) applications.

UL Yellow Card Link E207780-103351811

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	**29**	cm³/10min	ISO 1133
Temperature	**275**	°C	-
Load	**5**	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**14100**	MPa	ISO 527
Stress at break	**163**	MPa	ISO 527
Strain at break	**2.1**	%	ISO 527
Flexural modulus	**12300**	MPa	ISO 178
Izod impact strength, +23°C, 4mm	**64**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**16**	kJ/m²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	**16**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**14500**	MPa	ASTM D 638
Tensile Strength at Break	**168**	MPa	ASTM D 638
Elongation at Break	**2.2**	%	ASTM D 638
Flexural Modulus	**13200**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**153**	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	**144**	J/m	ASTM D 256
Temperature	**-30**	°C	-
Izod Impact unnotched, 1/8 in	**1050**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**211**	°C	ISO 75-1/-2
Vicat softening temperature, A	**213**	°C	ISO 306
Burning behav. at thickness h	**HB**	class	IEC 60695-11-10
Thickness tested	**0.7**	mm	-
ASTM Data			
Vicat Temperature	**212**	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Density	**1700**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**100 - 120**	°C	-
Pre-drying - Time	**4 - 8**	h	-
Processing humidity	**≤0.02**	%	-
Melt temperature	**265 - 285**	°C	-
Mold temperature	**100 - 140**	°C	-
Zone 1	**250 - 270**	°C	-
Zone 2	**260 - 280**	°C	-
Zone 3	**265 - 285**	°C	-

Characteristics

Processing
Injection Molding

Special Characteristics
High impact or impact modified

Regional Availability
North America, Europe, Asia Pacific