LNP™ THERMOTUF™ Compound WF008NA

PBT-GF40 — Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP THERMOTUF WF008NA compound is based on Polybutylene Terephthalate (PBT) resin containing 40% glass fiber. Added features of this grade include: High Modulus, Impact Modified, Good Metal Bonding Strength and Good Chemical Resistance suitable for Nano-Molding Technology (NMT) applications and Good Color Stability during anodizing process.

UL Yellow Card Link E207780-103732102

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	**32**	cm³/10min	ISO 1133
Temperature	**275**	°C	-
Load	**5**	kg	-
ASTM Data			
Melt Flow Index, MFI	**43**	g/10min	ASTM D 1238
Temperature	**275**	°C	-
Load	**5**	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**12500**	MPa	ISO 527
Stress at break	**155**	MPa	ISO 527
Strain at break	**3.2**	%	ISO 527
Flexural modulus	**11700**	MPa	ISO 178
Izod impact strength, +23°C, 4mm	**54**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**13**	kJ/m²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	**12**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**12800**	MPa	ASTM D 638
Tensile Strength at Break	**156**	MPa	ASTM D 638
Elongation at Break	**3.2**	%	ASTM D 638
Flexural Modulus	**11100**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**132**	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	**100**	J/m	ASTM D 256
Temperature	**-30**	°C	-
Izod Impact unnotched, 1/8 in	**912**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**208**	°C	ISO 75-1/-2
Vicat softening temperature, A	**221**	°C	ISO 306
Burning behav. at thickness h	**HB**	class	IEC 60695-11-10
Thickness tested	**0.7**	mm	-
ASTM Data			
DTUL @ 264 psi	**206**	°C	ASTM D 648
Vicat Temperature	**208**	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Density	**1610**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**100 - 120**	°C	-
Pre-drying - Time	**2 - 4**	h	-
Processing humidity	**≤0.02**	%	-
Melt temperature	**250 - 270**	°C	-
Mold temperature	**100 - 160**	°C	-
Feed temperature	**40 - 60**	°C	-
Zone 1	**240 - 260**	°C	-
Zone 2	**250 - 270**	°C	-
Zone 3	**250 - 270**	°C	-

Characteristics

Processing
Injection Molding

Special Characteristics
High impact or impact modified

Regional Availability
North America, Europe, Asia Pacific