LNP™ THERMOCOMP™ Compound RFB53XXZ - Americas

PA66-(GF+GB) Saudi Basic Industries Corporation (SABIC)

Product Texts
LNP THERMOCOMP RFB53XXZ compound is based on Nylon 6/6 resin containing 15% glass fiber, 25% glass bead.

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	**0.55**	mm/mm	ASTM D 955
Mold Shrinkage, TD	**1.45**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**8100**	MPa	ISO 527
Yield stress	**125**	MPa	ISO 527
Yield strain	**2.6**	%	ISO 527
Stress at break	**124**	MPa	ISO 527
Strain at break	**2.7**	%	ISO 527
Flexural modulus	**7040**	MPa	ISO 178
Flexural strength	**183**	MPa	ISO 178
Izod impact strength, +23°C, 4mm	**33**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**4**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**8450**	MPa	ASTM D 638
Tensile Strength at Yield	**124**	MPa	ASTM D 638
Tensile Strength at Break	**115**	MPa	ASTM D 638
Elongation at Yield	**2.6**	%	ASTM D 638
Elongation at Break	**2.7**	%	ASTM D 638
Flexural Modulus	**7320**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**37**	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	**470**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**234**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**253**	°C	ISO 75-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	**40**	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	**84.1**	E-6/K	ASTM D 696
DTUL @ 66 psi	**256**	°C	ASTM D 648
DTUL @ 264 psi	**241**	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Humidity absorption	**0.95**	%	Sim. to ISO 62
Water Absorption, 24hr	**0.63**	%	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	**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