LNP™ THERMOCOMP™ Compound RFB66 - Americas

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

Product Texts

LNP THERMOCOMP RFB66 compound is based on Nylon 6/6 resin containing 30% glass fiber, 30% 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	**13400**	MPa	ISO 527
Yield stress	**128**	MPa	ISO 527
Yield strain	**1.7**	%	ISO 527
Stress at break	**122**	MPa	ISO 527
Strain at break	**1.7**	%	ISO 527
Flexural modulus	**12600**	MPa	ISO 178
Flexural strength	**209**	MPa	ISO 178
Izod impact strength, +23°C, 4mm	**36**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**6**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**14980**	MPa	ASTM D 638
Tensile Strength at Yield	**138**	MPa	ASTM D 638
Tensile Strength at Break	**138**	MPa	ASTM D 638
Elongation at Yield	**1.8**	%	ASTM D 638
Elongation at Break	**1.8**	%	ASTM D 638
Flexural Modulus	**13000**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**63**	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	**532**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**232**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**249**	°C	ISO 75-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	**34.9**	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	**50.9**	E-6/K	ASTM D 696
DTUL @ 66 psi	**257**	°C	ASTM D 648
DTUL @ 264 psi	**247**	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Humidity absorption	**0.51**	%	Sim. to ISO 62
Water Absorption, 24hr	**0.34**	%	ASTM D 570
Density	**1700**	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