LNP™ THERMOCOMP™ Compound RC004SXS - Americas

PA66-CF20 — Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP THERMOCOMP RC004SXS compound is based on Nylon 6/6 resin containing 20% carbon fiber. Added features of this grade include: Electrically Conductive, Heat Stabilized.

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	**0.3**	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	**16700**	MPa	ISO 527
Stress at break	**242**	MPa	ISO 527
Strain at break	**2.5**	%	ISO 527
Flexural modulus	**12900**	MPa	ISO 178
Flexural strength	**331**	MPa	ISO 178
Izod impact strength, +23°C, 4mm	**49**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**6**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**16680**	MPa	ASTM D 638
Tensile Strength at Break	**222**	MPa	ASTM D 638
Elongation at Break	**2.2**	%	ASTM D 638
Flexural Modulus	**13700**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**67**	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	**884**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**249**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**260**	°C	ISO 75-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	**21.1**	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	**90**	E-6/K	ASTM D 696
DTUL @ 66 psi	**260**	°C	ASTM D 648
DTUL @ 264 psi	**252**	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Humidity absorption	**1.2**	%	Sim. to ISO 62
Density	**1230**	kg/m³	ISO 1183
Water Absorption, 24hr	**0.89**	%	ASTM D 570
Density	**1230**	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

Special Characteristics
Increased electrical conductivity

Regional Availability
North America