LNP™ THERMOCOMP™ Compound RC006 - Americas

PA66-CF30 — Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP THERMOCOMP RC006 compound is based on Nylon 6/6 resin containing 30% carbon fiber. Added features of this grade include: Electrically Conductive.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	**0.1**	%	ISO 294-4, 2577
Molding shrinkage, normal	**0.6**	%	ISO 294-4, 2577
ASTM Data			
Mold Shrinkage, MD	**0.1**	mm/mm	ASTM D 955
Mold Shrinkage, TD	**0.6**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**22300**	MPa	ISO 527
Stress at break	**271**	MPa	ISO 527
Strain at break	**1.9**	%	ISO 527
Flexural modulus	**21000**	MPa	ISO 178
Flexural strength	**412**	MPa	ISO 178
Izod impact strength, +23°C, 4mm	**67**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**11**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**27780**	MPa	ASTM D 638
Tensile Strength at Break	**266**	MPa	ASTM D 638
Elongation at Break	**1.7**	%	ASTM D 638
Flexural Modulus	**18750**	MPa	ASTM D 790
Flexural Strength	**406**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**96**	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	**1010**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ASTM Data			
DTUL @ 264 psi	**261**	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Density	**1270**	kg/m³	ISO 1183
Water Absorption, 24hr	**0.6**	%	ASTM D 570
Density	**1280**	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

Special Characteristics
Increased electrical conductivity