LNP™ THERMOCOMP™ Compound RC006 - Europe

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.

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**22300**	MPa	ISO 527
Yield stress	**261**	MPa	ISO 527
Stress at break	**250**	MPa	ISO 527
Strain at break	**2**	%	ISO 527
Flexural modulus	**18900**	MPa	ISO 178
Charpy impact strength, +23°C	**70**	kJ/m²	ISO 179/1eU
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
Rockwell hardness	**L108**	-	ISO 2039-2

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**252**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**261**	°C	ISO 75-1/-2
Vicat softening temperature, 120°C/h 50N	**255**	°C	ISO 306
Coeff. of linear therm. expansion, parallel	**8**	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	**86**	E-6/K	ISO 11359-1/-2

Electrical properties	Value	Unit	Test Standard
ISO Data			
Volume resistivity	**43.2**	Ohm*m	IEC 62631-3-1
Surface resistivity	**4320**	Ohm	IEC 62631-3-2
ASTM Data			
Surface Resistivity	**10000**	Ohm	ASTM D 257

Other properties	Value	Unit	Test Standard
Water absorption	**4.5**	%	Sim. to ISO 62
Density	**1270**	kg/m³	ISO 1183

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

Europe

Special Characteristics

Increased electrical conductivity