

LNP* Thermocomp* RC006

Polyamide 66

SABIC Innovative Plastics



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Technical Data

Product Description

LNP* Thermocomp* RC006 is a compound based on Nylon 66 resin containing Carbon Fiber. Added features of this material include: Electrically Conductive.

Also known as: LNP* Thermocomp* Compound RC-1006 BK8-115

Product reorder name: RC006

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet
Search for UL Yellow Card	• SABIC Innovative Plastics • LNP* Thermocomp*
Availability	• North America
Filler / Reinforcement	• Carbon Fiber Reinforcement
Features	• Electrically Conductive
Processing Method	• Injection Molding

Physical	Nominal Value Unit	Test Method
Specific Gravity	1.28 g/cm ³	ASTM D792 ISO 1183
Molding Shrinkage		
Flow: 24 hr	0.10 %	ASTM D955
Across Flow: 24 hr	0.60 %	ASTM D955
Across Flow: 24 hr	0.56 %	ISO 294-4
Flow: 24 hr	0.080 %	ISO 294-4
Water Absorption (24 hr, 50% RH)	0.60 %	ASTM D570
Mechanical	Nominal Value Unit	Test Method
Tensile Modulus		
-- ³	27800 MPa	ASTM D638
--	22700 MPa	ISO 527-2/1
Tensile Strength		
Break	266 MPa	ASTM D638
Break	271 MPa	ISO 527-2
Tensile Elongation		
Break	1.7 %	ASTM D638
Break	1.9 %	ISO 527-2
Flexural Modulus		
--	18800 MPa	ASTM D790
--	21000 MPa	ISO 178
Flexural Strength		
--	407 MPa	ASTM D790
--	412 MPa	ISO 178
Coefficient of Friction		ASTM D3702 Modified
vs. Itself - Dynamic	0.46	
vs. Itself - Static	0.36	
Wear Factor - Washer	20.0 ^{10^-10} in ⁵ -min/ft-lb-hr	ASTM D3702 Modified
Impact	Nominal Value Unit	Test Method
Notched Izod Impact		
23°C	96 J/m	ASTM D256
23°C ⁴	11 kJ/m ²	ISO 180/1A

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Impact	Nominal Value Unit	Test Method
Unnotched Izod Impact		
23°C	1000 J/m	ASTM D4812
23°C ⁴	68 kJ/m ²	ISO 180/1U
Instrumented Dart Impact		
23°C, Energy at Peak Load	15.0 J	ASTM D3763
--	3.00 J	ISO 6603-2
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		
1.8 MPa, Unannealed, 3.20 mm	262 °C	ASTM D648
CLTE		
Flow: -40 to 40°C	0.000011 cm/cm/°C	ASTM E831
Flow: -40 to 40°C	0.000012 cm/cm/°C	ISO 11359-2
Transverse: -40 to 40°C	0.000049 cm/cm/°C	ASTM E831 ISO 11359-2
Injection	Nominal Value Unit	
Drying Temperature	82.2 °C	
Drying Time	4.0 hr	
Suggested Max Moisture	0.15 to 0.25 %	
Rear Temperature	266 to 277 °C	
Middle Temperature	282 to 293 °C	
Front Temperature	293 to 304 °C	
Processing (Melt) Temp	282 to 304 °C	
Mold Temperature	93.3 to 110 °C	
Back Pressure	0.172 to 0.344 MPa	
Screw Speed	30 to 60 rpm	

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Typical properties: these are not to be construed as specifications.

³ 50 mm/min

⁴ 80*10*4

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Where to Buy

Supplier

SABIC Innovative Plastics

Pittsfield, MA USA

Telephone: 800-845-0600

Web: <http://www.sabic-ip.com/>

Distributor

Nexeo Solutions

Telephone: 800-531-7106

Web: <http://www.nexeosolutions.com/>

Availability: North America



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– Birgit Elvardt Bader, Production Manager, Micotron

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– Kevin Chase, Owner & President, Chase Plastics



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