



LNP™ THERMOCOMP™ Compound RC003 Europe-Africa-Middle East: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound RC1003

Product reorder name: RC003

15% carbon fibre reinforced Polyamide 66 injection moulding resin.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, break, 5 mm/min	170	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2	%	ISO 527
Tensile Modulus, 1 mm/min	13000	MPa	ISO 527
Flexural Stress, break, 2 mm/min	230	MPa	ISO 178
Flexural Modulus, 2 mm/min	10000	MPa	ISO 178
Hardness, Rockwell L	105	-	ISO 2039-2
IMPACT			
Izod Impact, notched 80*10*4 +23°C	5	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -20°C	4	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -40°C	3	kJ/m ²	ISO 180/1A
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	45	kJ/m ²	ISO 179/1eU
THERMAL			
CTE, 23°C to 60°C, flow	2.E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	1.1E-04	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/120	255	°C	ISO 306
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	252	°C	ISO 75/Be
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	250	°C	ISO 75/Ae
PHYSICAL			
Mold Shrinkage on Tensile Bar, flow (2) (5)	0.1 - 0.2	%	SABIC Method
Density	1.19	g/cm ³	ISO 1183
Water Absorption, (23°C/sat)	5.5	%	ISO 62
ELECTRICAL			
Volume Resistivity	1.78E+05	Ohm-cm	IEC 60093
Surface Resistivity, ROA	1.78E+05	Ohm	IEC 60093
FLAME CHARACTERISTICS			
UL Compliant, 94HB Flame Class Rating (3)(4)	1.6	mm	UL 94 by SABIC-IP



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Oxygen Index (LOI)	28	%	ISO 4589



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	75 - 85	°C
Drying Time	4 - 6	hrs
Maximum Moisture Content	0.2	%
Melt Temperature	260 - 290	°C
Nozzle Temperature	250 - 270	°C
Front - Zone 3 Temperature	260 - 280	°C
Middle - Zone 2 Temperature	260 - 280	°C
Rear - Zone 1 Temperature	270 - 290	°C
Hopper Temperature	60 - 80	°C
Mold Temperature	70 - 120	°C