LNP™ THERMOCOMP™ Compound RC003SXS
Europe-Africa-Middle East: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound RC-1003 HS
Product reorder name: RC003SXS

LNP* THERMOCOMP* RC003SXS is a compound based on PA 66 resin containing Carbon fiber. Added features include: Electrically Conductive, Heat Stabilized

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/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -20°C	4	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -40°C	3	kJ/m²	ISO 180/1A
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	45	kJ/m²	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/cm³	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

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.
(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
(4) Internal measurements according to UL standards.
(5) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

Source GMD, last updated:

PLEASE CONTACT YOUR LOCAL SALES OFFICE FOR AVAILABILITY IN YOUR AREA

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TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
FLAME CHARACTERISTICS			
Oxygen Index (LOI)	28	%	ISO 4589

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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	120	°C
Drying Time	2 - 4	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	320 - 360	°C
Nozzle Temperature	280 - 320	°C
Front - Zone 3 Temperature	320 - 360	°C
Middle - Zone 2 Temperature	320 - 360	°C
Rear - Zone 1 Temperature	280 - 320	°C
Hopper Temperature	60 - 90	°C
Mold Temperature	80 - 100	°C

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