LNP™ THERMOCOMP™ COMPOUND RC003SXS

RC-1003 HS

DESCRIPTION

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

TYPICAL PROPERTY VALUES

Revision 20191212

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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	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	1.6	mm	UL 94 by SABIC-IP
Oxygen Index (LOI)	28	%	ISO 4589
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	

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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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