SABIC Innovative Plastics™

LNP* Thermocomp* Compound RF00CS

Americas: COMMERCIAL

Also known as: THERMOCOMP RF-100-12 HS BK8-115
Product Reorder Name: RF00CS

LNP* Thermocomp* RF00CS is a compound based on Nylon 66 resin containing Glass Fiber. Added features of this material include: Heat Stabilized.

Property

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yield	253	MPa	ASTM D 638
Tensile Stress, break	253	MPa	ASTM D 638
Tensile Strain, yield	2.2	%	ASTM D 638
Tensile Strain, break	2.2	%	ASTM D 638
Tensile Modulus, 50 mm/min	21370	MPa	ASTM D 638
Flexural Stress	358	MPa	ASTM D 790
Flexural Modulus	19300	MPa	ASTM D 790
Tensile Stress, yield	253	MPa	ISO 527
Tensile Stress, break	253	MPa	ISO 527
Tensile Strain, yield	2	%	ISO 527
Tensile Strain, break	2	%	ISO 527
Tensile Modulus, 1 mm/min	21360	MPa	ISO 527
Flexural Stress	375	MPa	ISO 178
Flexural Modulus	20000	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	1228	J/m	ASTM D 4812
Izod Impact, notched, 23°C	160	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	10	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	76	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	19	kJ/m²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	260	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	255	°C	ASTM D 648
CTE, -40°C to 40°C, flow	3.78E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	1.62E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	3.8E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	1.6E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	260	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	254	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.72	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.3	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.4	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.29	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	0.44	%	ISO 294

Density	1.72	g/cm³	ISO 1183

Source GMD, last updated:2009/11/17

Processing

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

(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.