SABIC Innovative Plastics™

LNP* Thermocomp* Compound RF0029S

Americas: COMMERCIAL

Also known as: RF-1002 FR HS
Product Reorder Name: RF0029S

LNP* Thermocomp* RF0029S is a compound based on Nylon 66 resin containing Glass Fiber, Flame Retardant. Added features of this material include: Flame Retardant, Heat Stabilized.

Property

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yield	101	MPa	ASTM D 638
Tensile Stress, break	101	MPa	ASTM D 638
Tensile Strain, yield	2.5	%	ASTM D 638
Tensile Strain, break	2.5	%	ASTM D 638
Tensile Modulus, 50 mm/min	6890	MPa	ASTM D 638
Flexural Stress	151	MPa	ASTM D 790
Flexural Modulus	5510	MPa	ASTM D 790
Tensile Stress, yield	102	MPa	ISO 527
Tensile Stress, break	102	MPa	ISO 527
Tensile Strain, yield	2.4	%	ISO 527
Tensile Strain, break	2.4	%	ISO 527
Tensile Modulus, 1 mm/min	6370	MPa	ISO 527
Flexural Stress	150	MPa	ISO 178
Flexural Modulus	5900	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	501	J/m	ASTM D 4812
Izod Impact, notched, 23°C	42	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	8	J	ASTM D 3763
Multiaxial Impact	1	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	33	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	252	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	233	°C	ASTM D 648
CTE, -40°C to 40°C, flow	7.56E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	4.32E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	7.6E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	4.2E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	249	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	219	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.48	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.5	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.9 - 1.1	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1.2 - 1.4	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.98	%	ISO 294

Mold Shrinkage, xflow, 24 hrs	1.3	%	ISO 294
Density	1.48	g/cm³	ISO 1183

Source GMD, last updated:09/24/2008

Processing

Parameter Injection Molding	Value	Unit
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.15 - 0.25	%
Melt Temperature	275 - 290	°C
Front - Zone 3 Temperature	295 - 305	°C
Middle - Zone 2 Temperature	280 - 295	°C
Rear - Zone 1 Temperature	265 - 275	°C
Mold Temperature	80 - 95	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

Source GMD, last updated:09/24/2008

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.