SABIC Innovative Plastics™

LNP* Thermocomp* Compound EF006 Americas: COMMERCIAL

Also known as: EF-1006
Product Reorder Name: EF006

LNP THERMOCOMP* EF006 is a compound based on Polyetherimide resin containing Glass Fiber.

Property

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, break	188	MPa	ASTM D 638
Tensile Strain, break	2.4	%	ASTM D 638
Tensile Modulus, 50 mm/min	11440	MPa	ASTM D 638
Flexural Stress	270	MPa	ASTM D 790
Flexural Modulus	11370	MPa	ASTM D 790
Tensile Stress, break	177	MPa	ISO 527
Tensile Strain, break	2.2	%	ISO 527
Tensile Modulus, 1 mm/min	10380	MPa	ISO 527
Flexural Stress	263	MPa	ISO 178
Flexural Modulus	11510	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	758	J/m	ASTM D 4812
Izod Impact, notched, 23°C	106	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	12	J	ASTM D 3763
Multiaxial Impact	2	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	48	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	10	kJ/m²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 1.82 MPa, 3.2mm, unannealed	203	°C	ASTM D 648
CTE, -40°C to 40°C, flow	4.14E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	3.06E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	4.16E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	3.09E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	206	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.528	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.15	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.2	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.5	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.23	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.49	%	ISO 294
Wear Factor Washer	130	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.55	-	ASTM D 3702 Modified
Static COF	0.5	-	ASTM D 3702 Modified
Density	1.52	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.21	%	ISO 62

Source GMD, last updated:10/01/2004

Processing

Parameter Injection Molding	Value	Unit
Drying Temperature	120 - 150	°C
Drying Time	4	hrs
Maximum Moisture Content	0.05	%
Melt Temperature	360 - 365	°C
Front - Zone 3 Temperature	365 - 375	°C
Middle - Zone 2 Temperature	355 - 365	°C
Rear - Zone 1 Temperature	345 - 355	°C
Mold Temperature	120 - 150	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	60 - 100	rpm

Source GMD, last updated:10/01/2004

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.