SABIC Innovative Plastics™

LNP* Thermocomp* Compound DF006P

Americas: COMMERCIAL

Also known as: DF-1006 EP
Product Reorder Name: DF006P

LNP THERMOCOMP* DF006P is a compound based on Polycarbonate resin containing Glass Fiber. Added features of this material include: Exceptional Processing.

Property

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, break	124	MPa	ASTM D 638
Tensile Stress, yld, Type I, 5 mm/min	124	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	124	MPa	ASTM D 638
Tensile Strain, break	2.4	%	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	2.4	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.4	%	ASTM D 638
Tensile Modulus, 50 mm/min	10480	MPa	ASTM D 638
Flexural Stress	193	MPa	ASTM D 790
Flexural Stress, yld, 1.3 mm/min, 50 mm span	165	MPa	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	165	MPa	ASTM D 790
Flexural Modulus	8480	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	8720	MPa	ASTM D 790
Tensile Stress, break	125	MPa	ISO 527
Tensile Stress, yield, 5 mm/min	125	MPa	ISO 527
Tensile Stress, break, 5 mm/min	125	MPa	ISO 527
Tensile Strain, break	2.5	%	ISO 527
Tensile Modulus, 1 mm/min	10010	MPa	ISO 527
Flexural Stress	193	MPa	ISO 178
Flexural Modulus	8740	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	774	J/m	ASTM D 4812
Izod Impact, notched, 23°C	112	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	13	J	ASTM D 3763
Multiaxial Impact	2	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	47	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	10	kJ/m²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	134	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	131	°C	ASTM D 648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	134	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.424	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.1	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.15	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.67	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.09	%	ISO 294

Mold Shrinkage, xflow, 24 hrs	0.51	%	ISO 294
Density	1.42	g/cm³	ISO 1183
FLAME CHARACTERISTICS	Value	Unit	Standard
UL Compliant, 94V-2 Flame Class Rating (3)(4)	1.5	mm	UL 94 by GE
UL Compliant, 94V-0 Flame Class Rating (3)(4)	3	mm	UL 94 by GE

Source GMD, last updated:09/27/2004

Processing

Parameter Injection Molding	Value	Unit
Drying Temperature	120	°C
Drying Time	4	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	305 - 325	°C
Front - Zone 3 Temperature	320 - 330	°C
Middle - Zone 2 Temperature	310 - 320	°C
Rear - Zone 1 Temperature	295 - 305	°C
Mold Temperature	80 - 110	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

Source GMD, last updated:09/27/2004

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.