LNP™ THERMOCOMP™ Compound EC006PXQ

Americas: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound EC006PXQ
Product reorder name: EC006PXQ

LNP™ THERMOCOMP™ EC006PXQ is a compound based on Polyetherimide containing 30% Carbon FIber. Added features include: Electrically Conductive, Easy Molding.

TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	2770	kgf/cm²	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1.3 - 1.4	%	ASTM D 638
Tensile Modulus, 5 mm/min	301000	kgf/cm²	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	3470	kgf/cm²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	242600	kgf/cm²	ASTM D 790
Tensile Stress, break, 5 mm/min	248	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.2	%	ISO 527
Tensile Modulus, 1 mm/min	27560	MPa	ISO 527
Flexural Strain, break, 2 mm/min	334	%	ISO 178
Flexural Modulus, 2 mm/min	23060	MPa	ISO 178
Compressive Strength	244	MPa	SABIC Method
Shear Strength	1305	kgf/cm²	ASTM C 273
Shear Modulus	48190	kgf/cm²	ASTM C 273
IMPACT			
Izod Impact, unnotched, 23°C	59	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	8	cm-kgf/cm	ASTM D 256
Instrumented Impact Total Energy, 23°C	125	cm-kgf	ASTM D 3763
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	195	°C	ASTM D 648
CTE, -40°C to 150°C, flow	7.2E-06	1/°C	ASTM E 831
CTE, -40°C to 150°C, xflow	5.8E-05	1/°C	ASTM E 831
PHYSICAL			
Specific Gravity	1.39	-	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.11	%	ASTM D 570

(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.
(6) Needs hard coat to consistently pass 60 sec Vertical Burn.

Source GMD, last updated:

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PHYSICAL			
Mold Shrinkage, flow, 24 hrs (5)	0.03 - 0.1	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.1 - 0.6	%	ASTM D 955
Melt Flow Rate, 380°C/6.7 kgf	22	g/10 min	ASTM D 1238
ELECTRICAL			
Surface Resistivity	1.E+03	Ohm	ASTM D 257

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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	120 - 150	°C
Drying Time	4	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	380 - 400	°C
Front - Zone 3 Temperature	380 - 400	°C
Middle - Zone 2 Temperature	380 - 400	°C
Rear - Zone 1 Temperature	380 - 400	°C
Mold Temperature	165 - 180	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	50 - 100	rpm

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