LNP™ THERMOCOMP™ Compound EC006APQ

Americas: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound EC006APQ
Product reorder name: EC006APQ

LNP* THERMOCOMP* EC006APQ is a compound based on Polyetherimide containing 30% Carbon Fiber. Added features include: Electrically Conductive, High Flow, FAR25.853 Compliant.

TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	2860	kgf/cm²	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1.1 - 1.3	%	ASTM D 638
Tensile Modulus, 5 mm/min	311200	kgf/cm²	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	3560	kgf/cm²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	268100	kgf/cm²	ASTM D 790
Tensile Stress, break, 5 mm/min	252	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.1	%	ISO 527
Tensile Modulus, 1 mm/min	29250	MPa	ISO 527
Flexural Stress	332	MPa	ISO 178
Flexural Modulus, 2 mm/min	23930	MPa	ISO 178
Compressive Strength	231	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	72	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	8	cm-kgf/cm	ASTM D 256
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	195	°C	ASTM D 648
CTE, -40°C to 150°C, flow	7.E-06	1/°C	ASTM E 831
CTE, -40°C to 150°C, xflow	5.E-06	1/°C	ASTM E 831
PHYSICAL			
Specific Gravity	1.39	-	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.11	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.03	%	ASTM D 955

(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:

PLEASE CONTACT YOUR LOCAL SALES OFFICE FOR AVAILABILITY IN YOUR AREA.

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TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
PHYSICAL			
Mold Shrinkage, xflow, 24 hrs (5)	0.1	%	ASTM D 955
Melt Flow Rate, 380°C/6.7 kgf	69	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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