

**Americas: COMMERCIAL** 

## LNP\* Stat-kon\* Compound EE005E

Also known as: EC-1005 EM Product Reorder Name: EE005E

LNP STAT-KON\* EE005E is a compound based on Polyetherimide resin containing Carbon Fiber. Added features of this material include: Easy Molding.

## **Property**

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, break	200	MPa	ASTM D 638
Tensile Strain, break	2.1	%	ASTM D 638
Tensile Modulus, 50 mm/min	12330	MPa	ASTM D 638
Flexural Stress	277	MPa	ASTM D 790
Flexural Modulus	14320	MPa	ASTM D 790
Tensile Stress, break	194	MPa	ISO 527
Tensile Strain, break	2.1	%	ISO 527
Tensile Modulus, 1 mm/min	11700	MPa	ISO 527
Flexural Stress	276	MPa	ISO 178
Flexural Modulus	15010	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	448	J/m	ASTM D 4812
Izod Impact, notched, 23°C	53	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	10	J	ASTM D 3763
Multiaxial Impact	7	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	29	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 1.82 MPa, 3.2mm, unannealed	207	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.9E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	2.71E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	1.92E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	2.71E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	207	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.365	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.16	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.05 - 0.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.3 - 0.5	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.1 - 0.3	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.3 - 0.5	%	ISO 294
Density	1.36	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.23	%	ISO 62
ELECTRICAL	Value	Unit	Standard
Volume Resistivity	1.E+02 - 1.E+06	Ohm-cm	ASTM D 257
Surface Resistivity	1.E+02 - 1.E+05	Ohm	ASTM D 257

## **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.

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- (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.

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