



## LNP™ STAT-KON™ Compound DX05301C

### Americas: COMMERCIAL

Also known as: LNP™ STAT-KON™ Compound PDX-D-05301 CCS

Product reorder name: DX05301C

LNP STAT-KON DX05301C is a compound based on Polycarbonate containing Proprietary Filler(s). Added features of this material include: Clean Compounding System, Electrically Conductive, Low Ionic, Low Outgassing, Low LPC and ESD safe. Suitable for Semiconductor and Hard Disk Drive (HDD) Applications.

TYPICAL PROPERTIES <sup>1</sup>	TYPICAL VALUE	Unit	Standard
<b>MECHANICAL</b>			
Tensile Stress, yld, Type I, 5 mm/min	490	kgf/cm <sup>2</sup>	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	610	kgf/cm <sup>2</sup>	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	5.3	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	9.9	%	ASTM D 638
Tensile Modulus, 5 mm/min	26400	kgf/cm <sup>2</sup>	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	970	kgf/cm <sup>2</sup>	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	23200	kgf/cm <sup>2</sup>	ASTM D 790
Tensile Stress, yield, 5 mm/min	56	MPa	ISO 527
Tensile Stress, break, 5 mm/min	56	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	1.5	%	ISO 527
Tensile Strain, break, 5 mm/min	1.5	%	ISO 527
Tensile Modulus, 1 mm/min	2490	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	77	MPa	ISO 178
Flexural Modulus, 2 mm/min	2480	MPa	ISO 178
<b>IMPACT</b>			
Izod Impact, notched, 23°C	5	cm-kgf/cm	ASTM D 256
Izod Impact, notched 80*10*4 +23°C	5	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL</b>			
HDT, 1.82 MPa, 3.2mm, unannealed	132	°C	ASTM D 648
CTE, -40°C to 40°C, flow	5.1E-01	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	5.2E-01	1/°C	ASTM E 831
Vicat Softening Temp, Rate B/120	146	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	131	°C	ISO 75/Af

(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.



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TYPICAL PROPERTIES <sup>1</sup>	TYPICAL VALUE	Unit	Standard
<b>PHYSICAL</b>			
Specific Gravity	1.22	-	ASTM D 792
Melt Flow Rate, 300°C/5.0 kgf	22.6	g/10 min	ASTM D 1238
Density	1.22	g/cm <sup>3</sup>	ISO 1183
Melt Volume Rate, MVR at 300°C/5.0 kg	22	cm <sup>3</sup> /10 min	ISO 1133
<b>ELECTRICAL</b>			
Volume Resistivity	2.2E+05 - 5.5E+08	Ohm-cm	ASTM D 257
Surface Resistivity	2.5E+05 - 4.5E+08	Ohm	ASTM D 257

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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
<b>Injection Molding</b>		
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

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