



## 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  |





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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  |

