



## LNP\* Stat-kon\* Compound DEP42E

### Asia Pacific: COMMERCIAL

Also known as: LNP\* Stat-kon\* Compound DCL-4542 EM

Product reorder name: DEP42E

LNP STAT-KON\* DEP42E is a compound based on Polycarbonate resin containing Silicone, PTFE, Carbon Fiber. Added features of this material include: Easy Molding.

| TYPICAL PROPERTIES <sup>1</sup>         | TYPICAL VALUE | UNIT                | STANDARD    |
|-----------------------------------------|---------------|---------------------|-------------|
| <b>MECHANICAL</b>                       |               |                     |             |
| Tensile Stress, break                   | 1060          | kgf/cm <sup>2</sup> | ASTM D 638  |
| Tensile Strain, break                   | 2             | %                   | ASTM D 638  |
| Tensile Modulus, 50 mm/min              | 89200         | kgf/cm <sup>2</sup> | ASTM D 638  |
| Flexural Stress                         | 1640          | kgf/cm <sup>2</sup> | ASTM D 790  |
| Flexural Modulus                        | 78000         | kgf/cm <sup>2</sup> | ASTM D 790  |
| Tensile Stress, break                   | 105           | MPa                 | ISO 527     |
| Tensile Strain, break                   | 1.9           | %                   | ISO 527     |
| Tensile Modulus, 1 mm/min               | 8580          | MPa                 | ISO 527     |
| Flexural Stress                         | 160           | MPa                 | ISO 178     |
| Flexural Modulus                        | 8600          | MPa                 | ISO 178     |
| <b>IMPACT</b>                           |               |                     |             |
| Izod Impact, unnotched, 23°C            | 53            | cm-kgf/cm           | ASTM D 4812 |
| Izod Impact, notched, 23°C              | 8             | cm-kgf/cm           | ASTM D 256  |
| Instrumented Impact Energy @ peak, 23°C | 130           | cm-kgf              | ASTM D 3763 |
| Izod Impact, unnotched 80*10*4 +23°C    | 26            | kJ/m <sup>2</sup>   | ISO 180/1U  |
| Izod Impact, notched 80*10*4 +23°C      | 8             | kJ/m <sup>2</sup>   | ISO 180/1A  |
| <b>THERMAL</b>                          |               |                     |             |
| HDT, 0.45 MPa, 3.2 mm, unannealed       | 145           | °C                  | ASTM D 648  |
| HDT, 1.82 MPa, 3.2mm, unannealed        | 141           | °C                  | ASTM D 648  |
| CTE, -40°C to 40°C, flow                | 3.25E-05      | 1/°C                | ASTM E 831  |
| CTE, -40°C to 40°C, xflow               | 3.43E-05      | 1/°C                | ASTM E 831  |
| CTE, -40°C to 40°C, flow                | 3.25E-05      | 1/°C                | ISO 11359-2 |
| CTE, -40°C to 40°C, xflow               | 3.43E-05      | 1/°C                | ISO 11359-2 |



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| TYPICAL PROPERTIES <sup>1</sup>        | TYPICAL VALUE   | UNIT              | STANDARD   |
|----------------------------------------|-----------------|-------------------|------------|
| <b>THERMAL</b>                         |                 |                   |            |
| HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm | 146             | °C                | ISO 75/Bf  |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm  | 142             | °C                | ISO 75/Af  |
| <b>PHYSICAL</b>                        |                 |                   |            |
| Density                                | 1.32            | g/cm <sup>3</sup> | ASTM D 792 |
| Moisture Absorption, 50% RH, 24 hrs    | 0.15            | %                 | ASTM D 570 |
| Mold Shrinkage, flow, 24 hrs           | 0.2             | %                 | ASTM D 955 |
| Mold Shrinkage, xflow, 24 hrs          | 0.5             | %                 | ASTM D 955 |
| Mold Shrinkage, flow, 24 hrs           | 0.19            | %                 | ISO 294    |
| Mold Shrinkage, xflow, 24 hrs          | 0.51            | %                 | ISO 294    |
| <b>ELECTRICAL</b>                      |                 |                   |            |
| Surface Resistivity                    | 1.E+02 - 1.E+06 | 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  |