# LNP™ STAT-KON™ COMPOUND DX07323

REGION ASIA

## DESCRIPTION

LNP STAT-KON DX07323 is a compound based on polycarbonate resin containing conductive fillers. Added features of this compound includes: ESD safe and excellent low-temperature impact performance, intended for compliance to ATEX.

## TYPICAL PROPERTY VALUES

Revision 20190717

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|---|---|---|
| MECHANICAL | | | |
| Tensile Stress, yield | 45 | MPa | ASTM D 638 |
| Tensile Stress, break | 55 | MPa | ASTM D 638 |
| Tensile Strain, yield | 5 | % | ASTM D 638 |
| Tensile Strain, break | 9 | % | ASTM D 638 |
| Tensile Modulus, 5 mm/min | 2400 | MPa | ASTM D 638 |
| Flexural Stress | 84 | MPa | ASTM D 790 |
| Flexural Modulus | 2200 | MPa | ASTM D 790 |
| Tensile Stress, yield, 5 mm/min | 55 | MPa | ISO 527 |
| Tensile Stress, break, 5 mm/min | 44 | MPa | ISO 527 |
| Tensile Strain, yield, 5 mm/min | 5 | % | ISO 527 |
| Tensile Strain, break, 5 mm/min | 9 | % | ISO 527 |
| Tensile Modulus, 1 mm/min | 2400 | MPa | ISO 527 |
| Flexural Stress, break, 2 mm/min | 88 | MPa | ISO 178 |
| Flexural Modulus, 2 mm/min | 2400 | MPa | ISO 178 |
| IMPACT | | | |
| Izod Impact, unnotched, 23°C | 1600 | J/m | ASTM D 4812 |
| Izod Impact, unnotched, -40°C | 1500 | J/m | ASTM D 4812 |
| Izod Impact, notched, 23°C | 180 | J/m | ASTM D 256 |
| Izod Impact, notched, -40°C | 100 | J/m | ASTM D 256 |
| Izod Impact, unnotched 80*10*4 +23°C | 130 | kJ/m² | ISO 180/1U |
| Izod Impact, unnotched 80*10*4 -40°C | 100 | kJ/m² | ISO 180/1U |
| Izod Impact, notched 80*10*4 +23°C | 16 | kJ/m² | ISO 180/1A |
| Izod Impact, notched 80*10*4 -40°C | 10 | kJ/m² | ISO 180/1A |
| THERMAL | | | |
| HDT, 1.82 MPa, 3.2mm, unannealed | 125 | °C | ASTM D 648 |
| CTE, -40°C to 40°C, flow | 5.E-05 | 1/°C | ASTM E 831 |
| CTE, -40°C to 40°C, xflow | 5.E-05 | 1/°C | ASTM E 831 |
| CTE, -40°C to 40°C, flow | 5.E-05 | 1/°C | ISO 11359-2 |
| CTE, -40°C to 40°C, xflow | 5.E-05 | 1/°C | ISO 11359-2 |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm | 124 | °C | ISO 75/Af |
| Relative Temp Index, Elec (1) | 80 | °C | UL 746B |
| Relative Temp Index, Mech w/impact (1) | 80 | °C | UL 746B |
| Relative Temp Index, Mech w/o impact (1) | 80 | °C | UL 746B |
| PHYSICAL | | | |

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| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|---|---|---|
| Density | 1.26 | g/cm³ | ASTM D 792 |
| Mold Shrinkage, flow | 0.5 | % | SABIC method |
| Mold Shrinkage, xflow | 0.5 | % | SABIC method |
| Mold Shrinkage, flow, 24 hrs | 0.4 – 0.7 | % | ASTM D 955 |
| Mold Shrinkage, xflow, 24 hrs | 0.4 – 0.7 | % | ASTM D 955 |
| Melt Flow Rate, 300°C/10 kgf | 55 | g/10 min | ASTM D 1238 |
| Density | 1.26 | g/cm³ | ISO 1183 |
| Melt Volume Rate, MVR at 300°C/10.0 kg | 50 | cm³/10 min | ISO 1133 |
| ELECTRICAL | | | |
| Volume Resistivity | 1000000 – 10000000000 | Ohm-cm | ASTM D 257 |
| Surface Resistivity | 1.E+06 – 1.E+10 | Ohm | ASTM D 257 |
| FLAME CHARACTERISTICS (1) | | | |
| UL Yellow Card Link | E207780-101283809 | - | - |
| UL Recognized, 94V-1 Flame Class Rating | 2.5 | mm | UL 94 |
| INJECTION MOLDING | | | |
| Drying Temperature | 120 | °C | |
| Drying Time | 3 – 4 | hrs | |
| Drying Time (Cumulative) | 48 | hrs | |
| Maximum Moisture Content | 0.02 | % | |
| Melt Temperature | 295 – 315 | °C | |
| Nozzle Temperature | 290 – 310 | °C | |
| Front - Zone 3 Temperature | 295 – 315 | °C | |
| Middle - Zone 2 Temperature | 280 – 305 | °C | |
| Rear - Zone 1 Temperature | 270 – 295 | °C | |
| Mold Temperature | 70 – 95 | °C | |
| Back Pressure | 0.3 – 0.7 | MPa | |
| Screw Speed | 40 – 70 | rpm | |
| Shot to Cylinder Size | 40 – 60 | % | |
| Vent Depth | 0.025 – 0.076 | mm | |

(1) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

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