

LNPTM STAT-KONTM COMPOUND DEP23FXC

DCL-4523 SM HP REGION ASIA

DESCRIPTION

LNP STAT-KON* DEP23FXC is a compound based on Polycarbonate resin containing 15% Carbon Fiber, 10% PTFE/Silicone. Added features include: Electrically Conductive. Wear Resistant, Superior Molding.

TYPICAL PROPERTY VALUES

Revision 20180906

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|----------------|-------|--------------|
| MECHANICAL | | | |
| Tensile Stress, break | 120 | MPa | ASTM D 638 |
| Tensile Strain, break | 2 | % | ASTM D 638 |
| Tensile Modulus, 50 mm/min | 10540 | MPa | ASTM D 638 |
| Flexural Stress | 186 | MPa | ASTM D 790 |
| Flexural Modulus | 9100 | MPa | ASTM D 790 |
| Tensile Stress, break | 122 | MPa | ISO 527 |
| Tensile Strain, break | 1.8 | % | ISO 527 |
| Tensile Modulus, 1 mm/min | 10200 | MPa | ISO 527 |
| Flexural Stress | 186 | MPa | ISO 178 |
| Flexural Modulus | 10300 | MPa | ISO 178 |
| IMPACT | | | |
| Izod Impact, unnotched, 23°C | 411 | J/m | ASTM D 4812 |
| Izod Impact, notched, 23°C | 64 | J/m | ASTM D 256 |
| Instrumented Impact Energy @ peak, 23°C | 16 | J | ASTM D 3763 |
| Multiaxial Impact | 3 | J | ISO 6603 |
| Izod Impact, unnotched 80*10*4 +23°C | 27 | kJ/m² | ISO 180/1U |
| Izod Impact, notched 80*10*4 +23°C | 7 | kJ/m² | ISO 180/1A |
| THERMAL | | | |
| HDT, 0.45 MPa, 3.2 mm, unannealed | 141 | °C | ASTM D 648 |
| HDT, 1.82 MPa, 3.2mm, unannealed | 137 | °C | ASTM D 648 |
| CTE, -40°C to 40°C, flow | 3.65E-05 | 1/°C | ASTM E 831 |
| CTE, -40°C to 40°C, xflow | 3.33E-05 | 1/°C | ASTM E 831 |
| CTE, -40°C to 40°C, flow | 3.65E-05 | 1/°C | ISO 11359-2 |
| CTE, -40°C to 40°C, xflow | 3.33E-05 | 1/°C | ISO 11359-2 |
| HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm | 141 | °C | ISO 75/Bf |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm | 137 | °C | ISO 75/Af |
| PHYSICAL | | | |
| Density | 1.29 | g/cm³ | ASTM D 792 |
| Moisture Absorption, 50% RH, 24 hrs | 0.12 | % | ASTM D 570 |
| Mold Shrinkage, flow, 24 hrs | 0.2 | % | ASTM D 955 |
| Mold Shrinkage, xflow, 24 hrs | 0.3 | % | ASTM D 955 |
| Mold Shrinkage, flow, 24 hrs | 0.16 | % | ISO 294 |
| Mold Shrinkage, xflow, 24 hrs | 0.27 | % | ISO 294 |
| | | | |



| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---------------------------------------|-----------------|-------|-------------------|
| Density | 1.28 | g/cm³ | ISO 1183 |
| ELECTRICAL | | | |
| Surface Resistivity | 1.E+01 – 1.E+06 | Ohm | ASTM D 257 |
| FLAME CHARACTERISTICS | | | |
| UL Compliant, 94HB Flame Class Rating | 1.5 | mm | UL 94 by SABIC-IP |
| INJECTION MOLDING | | | |
| 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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