# LNP™ STAT-KON™ Compound KE004 - Americas

POM-CF20 Saudi Basic Industries Corporation (SABIC)

**Product Texts**

LNP STAT-KON KE004 compound is based on POM (Acetal) copolymer resin containing 20% carbon fiber. Added features of this grade include: Electrically Conductive.

UL Yellow Card Link E121562-101284439

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Molding shrinkage, parallel | **0.7** | % | ISO 294-4, 2577 |
| Molding shrinkage, normal | **1.7** | % | ISO 294-4, 2577 |
| **ASTM Data** | | | |
| Mold Shrinkage, MD | **0.7** | mm/mm | ASTM D 955 |
| Mold Shrinkage, TD | **1.7** | mm/mm | ASTM D 955 |

| Mechanical properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Tensile Modulus | **13000** | MPa | ISO 527 |
| Yield stress | **110** | MPa | ISO 527 |
| Yield strain | **1.4** | % | ISO 527 |
| Stress at break | **110** | MPa | ISO 527 |
| Strain at break | **1.4** | % | ISO 527 |
| Flexural modulus | **11500** | MPa | ISO 178 |
| Flexural strength | **160** | MPa | ISO 178 |
| Izod impact strength, +23°C, 4mm | **25** | kJ/m² | ISO 180/1U |
| Izod notched impact strength, +23°C, 4mm | **5** | kJ/m² | ISO 180/1A |
| **ASTM Data** | | | |
| Tensile Modulus | **14470** | MPa | ASTM D 638 |
| Tensile Strength at Yield | **121** | MPa | ASTM D 638 |
| Tensile Strength at Break | **121** | MPa | ASTM D 638 |
| Elongation at Yield | **1.6** | % | ASTM D 638 |
| Elongation at Break | **1.6** | % | ASTM D 638 |
| Flexural Modulus | **11030** | MPa | ASTM D 790 |
| Flexural Strength | **151** | MPa | ASTM D 790 |
| Izod Impact notched, 1/8 in | **48** | J/m | ASTM D 256 |
| Izod Impact unnotched, 1/8 in | **427** | J/m | ASTM D 256 |

| Thermal properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Temp. of deflection under load, 1.80 MPa | **160** | °C | ISO 75-1/-2 |
| Temp. of deflection under load, 0.45 MPa | **163** | °C | ISO 75-1/-2 |
| Burning behav. at 1.5 mm nom. thickn. | **HB** | class | IEC 60695-11-10 |
| Thickness tested | **1.5** | mm | - |
| **ASTM Data** | | | |
| DTUL @ 66 psi | **162** | °C | ASTM D 648 |
| DTUL @ 264 psi | **160** | °C | ASTM D 648 |

| Electrical properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ASTM Data** | | | |
| Surface Resistivity | **1000000** | Ohm | ASTM D 257 |

| Other properties | Value | Unit | Test Standard |
|---|---|---|---|
| Density | **1470** | kg/m³ | ISO 1183 |
| Water Absorption, 24hr | **0.2** | % | ASTM D 570 |
| Density | **1470** | kg/m³ | ASTM D 792 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|---|---|---|
| Pre-drying - Temperature | **80** | °C | - |
| Pre-drying - Time | **4** | h | - |

| | | | |
|---|---|---|---|
| Melt temperature | **200 - 215** | °C | - |
| Mold temperature | **80 - 110** | °C | - |
| Zone 1 | **175 - 190** | °C | - |
| Zone 2 | **195 - 205** | °C | - |
| Zone 3 | **210 - 220** | °C | - |
| Screw speed | **30 - 60** | rpm | - |
| Back pressure | **0.2 - 0.3** | MPa | - |

## Characteristics

**Processing**
Injection Molding

**Special Characteristics**
Increased electrical conductivity

**Regional Availability**
North America