# LNP™ STAT-KON™ Compound RD000

PA66-CD — Saudi Basic Industries Corporation (SABIC)

**Product Texts**

LNP STAT-KON RD000 compound is based on Nylon 6/6 resin containing conductive carbon powder. Added features of this grade include: Electrically Conductive.

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Molding shrinkage, parallel | **2.6** | % | ISO 294-4, 2577 |
| Molding shrinkage, normal | **2.4** | % | ISO 294-4, 2577 |
| **ASTM Data** | | | |
| Mold Shrinkage, MD | **2.7** | mm/mm | ASTM D 955 |
| Mold Shrinkage, TD | **2.4** | mm/mm | ASTM D 955 |

| Mechanical properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Tensile Modulus | **3100** | MPa | ISO 527 |
| Stress at break | **64** | MPa | ISO 527 |
| Strain at break | **7.6** | % | ISO 527 |
| Flexural modulus | **3000** | MPa | ISO 178 |
| Flexural strength | **96** | MPa | ISO 178 |
| Izod impact strength, +23°C, 4mm | **90** | kJ/m² | ISO 180/1U |
| Izod notched impact strength, +23°C, 4mm | **7** | kJ/m² | ISO 180/1A |
| **ASTM Data** | | | |
| Tensile Modulus | **3170** | MPa | ASTM D 638 |
| Tensile Strength at Break | **67** | MPa | ASTM D 638 |
| Elongation at Break | **4.5** | % | ASTM D 638 |
| Flexural Modulus | **2750** | MPa | ASTM D 790 |
| Flexural Strength | **95** | MPa | ASTM D 790 |
| Izod Impact notched, 1/8 in | **106** | J/m | ASTM D 256 |
| Izod Impact unnotched, 1/8 in | **1070** | J/m | ASTM D 256 |

| Thermal properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Temp. of deflection under load, 1.80 MPa | **77** | °C | ISO 75-1/-2 |
| **ASTM Data** | | | |
| DTUL @ 66 psi | **218** | °C | ASTM D 648 |
| DTUL @ 264 psi | **94** | °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 |
|---|---|---|---|
| Humidity absorption | **0.96** | % | Sim. to ISO 62 |
| Water Absorption, 24hr | **0.54** | % | ASTM D 570 |
| Density | **1190** | kg/m³ | ASTM D 792 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|---|---|---|
| Pre-drying - Temperature | **80** | °C | - |
| Pre-drying - Time | **4** | h | - |
| Processing humidity | **≤0.25** | % | - |
| Melt temperature | **280 - 305** | °C | - |
| Mold temperature | **95 - 110** | °C | - |
| Zone 1 | **265 - 275** | °C | - |
| Zone 2 | **280 - 295** | °C | - |
| Zone 3 | **295 - 305** | °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, Europe, Asia Pacific