# KOPA® KN136

PA6 — Kolon Industries

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|---|---|---|---|
| **ASTM Data** | | | |
| Mold Shrinkage, MD | **0.014** | mm/mm | ASTM D 955 |

| Mechanical properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Tensile Strength | **75** | MPa | ISO 527 |
| Flexural modulus, 23°C | **2400** | MPa | ISO 178 |
| Charpy notched impact strength, +23°C | **5** | kJ/m² | ISO 179/1eA |
| Rockwell hardness | **R 120** | - | ISO 2039-2 |
| **ASTM Data** | | | |
| Tensile Strength | **81** | MPa | ASTM D 638 |
| Flexural Modulus | **2744** | MPa | ASTM D 790 |
| Flexural Strength | **123** | MPa | ASTM D 790 |
| Rockwell Hardness | **R 120** | - | ASTM D 785 |
| Izod Impact notched, 1/8 in | **74** | J/m | ASTM D 256 |

| Thermal properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Melting temperature, 10°C/min | **220** | °C | ISO 11357-1/-3 |
| Temp. of deflection under load, 1.80 MPa | **60** | °C | ISO 75-1/-2 |
| **ASTM Data** | | | |
| UL 94 Flame rating | **HB** | - | UL 94 |
| Thickness tested | **0.8** | mm | - |
| Coefficient of Thermal Expansion, MD | **80** | E-6/K | ASTM D 696 |
| DTUL @ 66 psi | **180** | °C | ASTM D 648 |
| DTUL @ 264 psi | **65** | °C | ASTM D 648 |
| Melting Temperature | **220** | °C | ASTM D 3418 |

| Electrical properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ASTM Data** | | | |
| Dielectric Strength, Short Time | **20** | kV/mm | ASTM D 149 |
| Dielectric Constant, 1 MHz | **3.4** | - | ASTM D 150 |
| Arc Resistance | **120** | s | ASTM D 495 |

| Other properties | Value | Unit | Test Standard |
|---|---|---|---|
| Density | **1130** | kg/m³ | ISO 1183 |
| Density | **1140** | kg/m³ | ASTM D 792 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|---|---|---|
| Pre-drying - Temperature | **80 - 100** | °C | - |
| Pre-drying - Time | **4 - 5** | h | - |
| Processing humidity | **≤0.05** | % | - |
| Mold temperature | **60 - 80** | °C | - |
| Zone 1 | **230** | °C | - |
| Zone 2 | **240** | °C | - |
| Zone 3 | **250** | °C | - |
| Nozzle temperature | **250** | °C | - |

## Characteristics

**Processing**

Injection Molding

**Regional Availability**

North America, Asia Pacific

**Applications**

Automotive