

Product Texts

LNP ELCRIN WF008NiQ is an iQ PBT/glass fiber compound for nano-molding technology (NMT) application. Added features of this material include: >20% PCR content, high modulus, excellent metal bonding force, good surface quality, high impact, good adhesion and good color stability during anodizing process.

UL Yellow Card Link: [E207780-104592047](https://www.ul.com/yellow-card/E207780-104592047)

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|-------------------------------------|-------|------------------------|---------------|
| ISO Data | | | |
| Melt volume-flow rate, MVR | 30 | cm ³ /10min | ISO 1133 |
| Temperature | 275 | °C | - |
| Load | 5 | kg | - |
| ASTM Data | | | |
| Melt Flow Index, MFI | 39 | g/10min | ASTM D 1238 |
| Temperature | 275 | °C | - |
| Load | 5 | kg | - |
| Mold Shrinkage, MD | 0.002 | mm/mm | ASTM D 955 |
| Mold Shrinkage, TD | 0.005 | mm/mm | ASTM D 955 |

| Mechanical properties | Value | Unit | Test Standard |
|--|-------|-------------------|---------------|
| ISO Data | | | |
| Tensile Modulus | 13000 | MPa | ISO 527 |
| Stress at break | 162 | MPa | ISO 527 |
| Strain at break | 2.6 | % | ISO 527 |
| Flexural modulus, 23°C | 11000 | MPa | ISO 178 |
| Flexural strength | 223 | MPa | ISO 178 |
| Charpy impact strength, +23°C, 3mm | 63 | kJ/m ² | ISO 179/1eU |
| Charpy notched impact strength, +23°C, 3mm | 15.5 | kJ/m ² | ISO 179/1eA |
| Charpy notched impact strength, -30°C, 3mm | 14.3 | kJ/m ² | ISO 179/1eA |
| Izod impact strength, +23°C | 53 | kJ/m ² | ISO 180/1U |
| Izod notched impact strength, +23°C | 15 | kJ/m ² | ISO 180/1A |
| Izod notched impact strength | 14 | kJ/m ² | ISO 180/1A |
| Temperature | -30 | °C | - |
| ASTM Data | | | |
| Tensile Modulus | 13200 | MPa | ASTM D 638 |
| Tensile Strength at Break | 165 | MPa | ASTM D 638 |
| Elongation at Break | 2.8 | % | ASTM D 638 |
| Flexural Modulus | 10900 | MPa | ASTM D 790 |
| Flexural Strength | 225 | MPa | ASTM D 790 |
| Izod Impact notched, 1/8 in | 160 | J/m | ASTM D 256 |
| Izod Impact notched, Low-Temperature | 135 | J/m | ASTM D 256 |
| Temperature | -30 | °C | - |
| Izod Impact unnotched, 1/8 in | 1000 | J/m | ASTM D 256 |

| Thermal properties | Value | Unit | Test Standard |
|---|-------|-------|-----------------|
| ISO Data | | | |
| Temp. of deflection under load, 1.80 MPa | 206 | °C | ISO 75-1/-2 |
| Temp. of deflection under load, 0.45 MPa | 218 | °C | ISO 75-1/-2 |
| Vicat softening temperature, B | 201 | °C | ISO 306 |
| Coeff. of linear therm. expansion, parallel | 18 | E-6/K | ISO 11359-1/-2 |
| Coeff. of linear therm. expansion, normal | 68 | E-6/K | ISO 11359-1/-2 |
| Burning behav. at thickness h | HB | class | IEC 60695-11-10 |
| Thickness tested | 0.7 | mm | - |
| Yellow Card available | yes | - | - |
| ASTM Data | | | |
| UL 94 Flame rating | HB | - | UL 94 |
| Thickness tested | 0.7 | mm | - |
| Coefficient of Thermal Expansion, MD | 19 | E-6/K | ASTM D 696 |
| Coefficient of Thermal Expansion, TD | 64 | E-6/K | ASTM D 696 |
| DTUL @ 66 psi | 217 | °C | ASTM D 648 |

LNP™ ELCRIN™ WF008NiQ

PBT-GF

Saudi Basic Industries Corporation (SABIC)

| | | | |
|-------------------|------------|----|-------------|
| DTUL @ 264 psi | 206 | °C | ASTM D 648 |
| Vicat Temperature | 200 | °C | ASTM D 1525 |

| Other properties | Value | Unit | Test Standard |
|------------------|-------------|-------------------|---------------|
| Density | 1600 | kg/m ³ | ISO 1183 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|------------------|------|---------------|
| Pre-drying - Temperature | 100 - 120 | °C | - |
| Pre-drying - Time | 2 - 4 | h | - |
| Processing humidity | ≤0.02 | % | - |
| Melt temperature | 250 - 270 | °C | - |
| Mold temperature | 100 - 150 | °C | - |
| Feed temperature | 40 - 60 | °C | - |
| Zone 1 | 240 - 260 | °C | - |
| Zone 2 | 250 - 275 | °C | - |
| Zone 3 | 250 - 275 | °C | - |
| Nozzle temperature | 255 - 275 | °C | - |

Characteristics**Processing**

Injection Molding

Special Characteristics

High impact or impact modified

Features

Color Stability, Good Adhesion

Certifications

Recycled Resin Content

Applications

IT / Business Machine, Electrical and Electronical

Regional Availability

North America, Europe, Asia Pacific, South and Central America