

**Product Texts**

LNP KONDUIT PX11311 compound is based on Nylon 6 resin containing mineral and glass fiber. Added features of this grade include: Thermally Conductive, Electrically Insulative and Non-Brominated, Non-Chlorinated Flame Retardant.

UL Yellow Card Link [E207780-101041511](https://www.ul.com/yellow-card/E207780-101041511)

| Processing/Physical Characteristics | Value | Unit                   | Test Standard |
|-------------------------------------|-------|------------------------|---------------|
| <b>ISO Data</b>                     |       |                        |               |
| Melt volume-flow rate, MVR          | 49    | cm <sup>3</sup> /10min | ISO 1133      |
| Temperature                         | 300   | °C                     | -             |
| Load                                | 10    | kg                     | -             |
| <b>ASTM Data</b>                    |       |                        |               |
| Mold Shrinkage, MD                  | 0.33  | mm/mm                  | ASTM D 955    |
| Mold Shrinkage, TD                  | 0.48  | mm/mm                  | ASTM D 955    |

| Mechanical properties         | Value | Unit | Test Standard |
|-------------------------------|-------|------|---------------|
| <b>ASTM Data</b>              |       |      |               |
| Tensile Modulus               | 7240  | MPa  | ASTM D 638    |
| Tensile Strength at Break     | 52    | MPa  | ASTM D 638    |
| Elongation at Break           | 2     | %    | ASTM D 638    |
| Flexural Modulus              | 9040  | MPa  | ASTM D 790    |
| Izod Impact notched, 1/8 in   | 43    | J/m  | ASTM D 256    |
| Izod Impact unnotched, 1/8 in | 183   | J/m  | ASTM D 256    |

| Thermal properties                    | Value | Unit     | Test Standard   |
|---------------------------------------|-------|----------|-----------------|
| <b>ISO Data</b>                       |       |          |                 |
| Burning behav. at thickness h         | V-0   | class    | IEC 60695-11-10 |
| Thickness tested                      | 1.0   | mm       | -               |
| Glow Wire Flammability Index (GWFI)   | 960   | °C       | IEC 60695-2-12  |
| Glow Wire Flammability Index (GWFI)   | 960   | °C       | IEC 60695-2-12  |
| Glow Wire Ignition Temperature (GWIT) | 775   | °C       | IEC 60695-2-13  |
| GWIT - thickness tested (1)           | 1     | mm       | -               |
| Glow Wire Ignition Temperature (GWIT) | 850   | °C       | IEC 60695-2-13  |
| GWIT - thickness tested (3)           | 3     | mm       | -               |
| <b>ASTM Data</b>                      |       |          |                 |
| Specific Heat                         | 1420  | J/(kg K) | ASTM C 351      |

| Electrical properties           | Value | Unit  | Test Standard |
|---------------------------------|-------|-------|---------------|
| <b>ISO Data</b>                 |       |       |               |
| Comparative tracking index      | 600   | -     | IEC 60112     |
| <b>ASTM Data</b>                |       |       |               |
| Dielectric Strength, Short Time | 10    | kV/mm | ASTM D 149    |
| Surface Resistivity             | 1E15  | Ohm   | ASTM D 257    |

| Other properties    | Value | Unit              | Test Standard  |
|---------------------|-------|-------------------|----------------|
| Humidity absorption | 0.04  | %                 | Sim. to ISO 62 |
| Density             | 1740  | kg/m <sup>3</sup> | 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                            | 270 - 295 | °C   | -             |
| Mold temperature                            | 85 - 100  | °C   | -             |
| Zone 1                                      | 260 - 275 | °C   | -             |
| Zone 2                                      | 270 - 290 | °C   | -             |
| Zone 3                                      | 270 - 290 | °C   | -             |
| Screw speed                                 | 20 - 60   | rpm  | -             |

Back pressure

**0.2 - 0.3**

MPa

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**Characteristics**

**Processing**

Injection Molding

**Special Characteristics**

Flame retardant, Thermally Conductive

**Additives**

Flame retarding agent

**Regional Availability**

Asia Pacific