

**Product Texts**

LNP KONDUIT PX13012 compound is based on Nylon 6 resin containing mineral. Added features of this grade include: Thermally Conductive, Electrically Insulative and Non-Brominated, Non-Chlorinated Flame Retardant.

UL Yellow Card Link [E45329-101769086](https://www.ul.com/yellow-card/E45329-101769086)

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Molding shrinkage, parallel	0.6	%	ISO 294-4, 2577
Molding shrinkage, normal	0.7	%	ISO 294-4, 2577
<b>ASTM Data</b>			
Mold Shrinkage, MD	0.55	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.65	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	13000	MPa	ISO 527
Stress at break	75	MPa	ISO 527
Strain at break	1.1	%	ISO 527
Flexural modulus	12000	MPa	ISO 178
Izod impact strength, +23°C, 4mm	9	kJ/m <sup>2</sup>	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	3	kJ/m <sup>2</sup>	ISO 180/1A
<b>ASTM Data</b>			
Tensile Modulus	10350	MPa	ASTM D 638
Tensile Strength at Yield	68	MPa	ASTM D 638
Elongation at Break	1.2	%	ASTM D 638
Flexural Modulus	11800	MPa	ASTM D 790
Izod Impact notched, 1/8 in	15	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	152	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Temp. of deflection under load, 1.80 MPa	160	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	203	°C	ISO 75-1/-2
Burning behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	0.8	mm	-
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature (GWIT)	800	°C	IEC 60695-2-13
GWIT - thickness tested (3)	3	mm	-
<b>ASTM Data</b>			
DTUL @ 66 psi	203	°C	ASTM D 648
DTUL @ 264 psi	137	°C	ASTM D 648

Electrical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Comparative tracking index	600	-	IEC 60112
<b>ASTM Data</b>			
Dielectric Strength, Short Time	7.2	kV/mm	ASTM D 149
Surface Resistivity	4E14	Ohm	ASTM D 257

Other properties	Value	Unit	Test Standard
Density	1680	kg/m <sup>3</sup>	ISO 1183

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	<b>85 - 100</b>	°C	-
Zone 1	<b>260 - 275</b>	°C	-
Zone 2	<b>270 - 290</b>	°C	-
Zone 3	<b>270 - 290</b>	°C	-
Screw speed	<b>20 - 60</b>	rpm	-
Back pressure	<b>0.2 - 0.3</b>	MPa	-

**Characteristics****Processing**

Injection Molding

**Special Characteristics**

Flame retardant, Thermally Conductive

**Additives**

Flame retarding agent

**Regional Availability**

North America, Europe, Asia Pacific