

# LNP<sup>TM</sup> KONDUIT<sup>TM</sup> COMPOUND PX10323H

PX10323  
REGION ASIA

## DESCRIPTION

LNP KONDUIT PX10323H is a compound based on PA6 resin containing glass fiber. Added features include thermal conductivity and healthcare.

## TYPICAL PROPERTY VALUES

Revision 20200422

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL</b>			
Tensile Stress, brk, Type I, 5 mm/min	70	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	0.9	%	ASTM D 638
Tensile Modulus, 5 mm/min	13700	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	96	MPa	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	95	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	14200	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	73	MPa	ISO 527
Tensile Strain, break, 5 mm/min	0.8	%	ISO 527
Tensile Modulus, 1 mm/min	14000	MPa	ISO 527
Flexural Stress, break, 2 mm/min	96	MPa	ISO 178
Flexural Modulus, 2 mm/min	14300	MPa	ISO 178
Impact Strength	3.7 – 6.8	kJ/m <sup>2</sup>	ISO R179
<b>IMPACT</b>			
Izod Impact, unnotched, 23°C	73	J/m	ASTM D 4812
Izod Impact, notched, 23°C	30	J/m	ASTM D 256
Izod Impact, unnotched 80°10'4 +23°C	6	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80°10'4 +23°C	3	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL</b>			
HDT, 1.82 MPa, 6.4 mm, unannealed	204	°C	ASTM D 648
CTE, 40°C to 120°C, flow	1.24E-05	1/°C	ASTM E 831
CTE, 40°C to 120°C, xflow	7.27E-05	1/°C	ASTM E 831
Thermal Conductivity through-plane, 60°60°3mm plaque	1.5	W/m-K	ISO 22007-2
Thermal Conductivity in-plane, 60°60°3mm plaque	18	W/m-K	ISO 22007-2
Thermal Conductivity through-plane, 10°10°3mm sample	3.5	W/m-K	ASTM E 1461-07
Thermal Conductivity in-plane, 25°0.4mm disc	15	W/m-K	ASTM E 1461-07
HDT/Bf, 0.45 MPa Flatw 80°10'4 sp=64mm	217	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80°10'4 sp=64mm	201	°C	ISO 75/Af
<b>PHYSICAL</b>			
Density	1.61	g/cm <sup>3</sup>	ASTM D 792
Mold Shrinkage, flow, 24 hrs	0.2	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.22	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.04	%	ISO 62
<b>ELECTRICAL</b>			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Surface Resistivity	1.05E+06	Ohm	ASTM D 257
<b>FLAME CHARACTERISTICS</b>			
Glow Wire Flammability Index 850°C, passes at	1	mm	IEC 60695-2-12
Glow Wire Flammability Index 960°C, passes at	1.6	mm	IEC 60695-2-12
Glow Wire Ignitability Temperature, 1.0 mm	825	°C	IEC 60695-2-13
<b>INJECTION MOLDING</b>			
Drying Temperature	80	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.15 – 0.25	%	
Melt Temperature	270 – 295	°C	
Front - Zone 3 Temperature	270 – 290	°C	
Middle - Zone 2 Temperature	270 – 290	°C	
Rear - Zone 1 Temperature	260 – 275	°C	
Mold Temperature	85 – 100	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	20 – 60	rpm	

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