



LNP™ KONDUIT™ Compound PX10323

Europe-Africa-Middle East: COMMERCIAL

Also known as: LNP™ KONDUIT™ Compound PX10323

Product reorder name: PX10323

Thermally conductive, electrically conductive mineral filled PA6 compound

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	550	kgf/cm ²	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1	%	ASTM D 638
Tensile Modulus, 50 mm/min	109600	kgf/cm ²	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	790	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	126400	kgf/cm ²	ASTM D 790
Tensile Stress, break, 5 mm/min	75	MPa	ISO 527
Tensile Strain, break, 5 mm/min	0.9	%	ISO 527
Tensile Modulus, 1 mm/min	16000	MPa	ISO 527
Flexural Stress, break, 2 mm/min	90	MPa	ISO 178
Flexural Modulus, 2 mm/min	14000	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	14	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	2	cm-kgf/cm	ASTM D 256
Izod Impact, unnotched 80*10*4 +23°C	8	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	3	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	186	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.61E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	3.56E-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, ø25*0.4mm disc	15	W/m-K	ASTM E 1461-07



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
CTE, -30°C to 80°C, flow	1.4E-05	1/°C	ISO 11359-2
CTE, -30°C to 80°C, xflow	3.95E-05	1/°C	ISO 11359-2
CTE, 23°C to 80°C, flow	1.62E-05	1/°C	ISO 11359-2
CTE, 23°C to 80°C, xflow	4.77E-05	1/°C	ISO 11359-2
Ball Pressure Test, 165°C +/- 2°C	PASSES	-	IEC 60695-10-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	200	°C	ISO 75/Af
PHYSICAL			
Density	1.61	g/cm ³	ASTM D 792
Mold Shrinkage, flow, 24 hrs (5)	0.15	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.17	%	ASTM D 955
Density	1.61	g/cm ³	ISO 1183
ELECTRICAL			
Surface Resistivity	3.E+05	Ohm	ASTM D 257
FLAME CHARACTERISTICS			
UL Recognized, 94HB Flame Class Rating (3)	1	mm	UL 94
Glow Wire Flammability Index 650°C, passes at	1	mm	IEC 60695-2-12
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



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	80 - 90	°C
Drying Time	3 - 4	hrs
Melt Temperature	270 - 300	°C
Nozzle Temperature	270 - 300	°C
Front - Zone 3 Temperature	270 - 300	°C
Middle - Zone 2 Temperature	270 - 300	°C
Rear - Zone 1 Temperature	260 - 290	°C
Mold Temperature	80 - 100	°C
Back Pressure	3 - 9	MPa
Screw Speed	30 - 150	rpm