



LNP™ KONDUIT™ Compound PX11311U

Europe-Africa-Middle East: COMMERCIAL

Thermally conductive mineral and glass fiber filled PA6 compliant with ECO protocols, non-brominated, non chlorinated

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, break, 5 mm/min	105	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.7	%	ISO 527
Tensile Modulus, 1 mm/min	12000	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	170	MPa	ISO 178
Flexural Modulus, 2 mm/min	11000	MPa	ISO 178
IMPACT			
Izod Impact, unnotched 80*10*4 +23°C	25	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	3	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm	209	°C	ASTM D 648
CTE, -40°C to 40°C, flow	3.08E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	4.77E-05	1/°C	ASTM E 831
Thermal Conductivity through-plane, 60*60*3mm plaque	0.8	W/m-K	ISO 22007-2
Thermal Conductivity in-plane, 60*60*3mm plaque	1.5	W/m-K	ISO 22007-2
CTE, -30°C to 80°C, flow	3.46E-05	1/°C	ISO 11359-2
CTE, -30°C to 80°C, xflow	6.04E-05	1/°C	ISO 11359-2
CTE, 23°C to 80°C, flow	3.72E-05	1/°C	ISO 11359-2
CTE, 23°C to 80°C, xflow	7.34E-05	1/°C	ISO 11359-2
Thermal Conductivity through-plane, ø80*3mm discs	1.1	W/m-K	ISO 22007-2
Thermal Conductivity in-plane, ø80*3mm discs	1.3	W/m-K	ISO 22007-2
Ball Pressure Test, 125°C +/- 2°C	PASSES	-	IEC 60695-10-2
Ball Pressure Test, 165°C +/- 2°C	PASSES	-	IEC 60695-10-2
Vicat Softening Temp, Rate B/120	205	°C	ISO 306



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THERMAL			
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	208	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	185	°C	ISO 75/Af
PHYSICAL			
Mold Shrinkage, flow, 24 hrs (5)	0.45	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	0.65	%	ISO 294
Density	1.74	g/cm ³	ISO 1183
Water Absorption, 23°C/24hrs	0.36	%	ISO 62-1
ELECTRICAL			
Surface Resistivity	1.E+16	Ohm	ASTM D 257
Dielectric Strength, in oil, 1.6 mm	15.9	kV/mm	ASTM D 149
Hot Wire Ignition {PLC}	0	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	0	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	0	PLC Code	UL 746A
Comparative Tracking Index	600	V	IEC 60112
FLAME CHARACTERISTICS			
UL Compliant, 94V-0 Flame Class Rating (3)(4)	1	mm	UL 94 by SABIC-IP
UL Recognized, 94V-0 Flame Class Rating (3)	1	mm	UL 94
Glow Wire Flammability Index 960°C, passes at	1	mm	IEC 60695-2-12
Glow Wire Ignitability Temperature, 1.0 mm	800	°C	IEC 60695-2-13
Glow Wire Ignitability Temperature, 1.5 mm	775	°C	IEC 60695-2-13
Glow Wire Ignitability Temperature, 1.6 mm	775	°C	IEC 60695-2-13
Glow Wire Ignitability Temperature, 3.0 mm	800	°C	IEC 60695-2-13



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
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