

LNP™ KONDUIT™ COMPOUND PX13012

REGION EUROPE

DESCRIPTION

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

TYPICAL PROPERTY VALUES

Revision 20170816

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	68	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1.2	%	ASTM D 638
Tensile Modulus, 5 mm/min	10350	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	119	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	11800	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	75	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.1	%	ISO 527
Tensile Modulus, 1 mm/min	13000	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	105	MPa	ISO 178
Flexural Modulus, 2 mm/min	12000	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	152	J/m	ASTM D 4812
Izod Impact, notched, 23°C	15	J/m	ASTM D 256
Izod Impact, unnotched 80*10*4 +23°C	9	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	203	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	137	°C	ASTM D 648
CTE, -40°C to 40°C, flow	3.3E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	4.4E-05	1/°C	ASTM E 831
Thermal Conductivity through-plane, 60*60*3mm plaque	1.2	W/m-K	ISO 22007-2
Thermal Conductivity in-plane, 60*60*3mm plaque	5.5	W/m-K	ISO 22007-2
CTE, -30°C to 80°C, flow	3.9E-05	1/°C	ISO 11359-2
CTE, -30°C to 80°C, xflow	5.5E-05	1/°C	ISO 11359-2

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Ball Pressure Test, 165°C +/- 2°C	PASSES	-	IEC 60695-10-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	203	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	160	°C	ISO 75/Af
PHYSICAL			
Mold Shrinkage on Tensile Bar, flow (2) (5)	0.7	%	SABIC method
Mold Shrinkage, flow, 24 hrs (5)	0.55	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.65	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.55	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	0.65	%	ISO 294
Density	1.68	g/cm ³	ISO 1183
Water Absorption, 23°C/24hrs	0.23	%	ISO 62-1
ELECTRICAL			
Surface Resistivity	4.E+14	Ohm	ASTM D 257
Dielectric Strength, in oil, 1.6 mm	7.2	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 Recognized, 94V-0 Flame Class Rating (3)	0.8	mm	UL 94
Glow Wire Flammability Index 960°C, passes at	0.8	mm	IEC 60695-2-12
Glow Wire Ignitability Temperature, 0.8 mm	750	°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
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	

DISCLAIMER

The information contained herein may include typical properties of our products or their typical performances when used in certain



typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.

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