LNP™ KONDUIT™ COMPOUND PX10323

PX10323
REGION ASIA

DESCRIPTION

LNP KONDUIT PX10323 is a compound based on PA6 resin containing glass fiber. Added features include thermal conductivity.

TYPICAL PROPERTY VALUES

Revision 20200204

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
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/m²	ISO R179
IMPACT			
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/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	3	kJ/m²	ISO 180/1A
THERMAL			
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
PHYSICAL			
Density	1.61	g/cm³	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
ELECTRICAL			

© 2020 Copyright by SABIC. All rights reserved

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Surface Resistivity	1.05E+06	Ohm	ASTM D 257
FLAME CHARACTERISTICS			
UL Recognized, 94HB Flame Class Rating	1	mm	UL 94
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
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

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.

© 2020 Copyright by SABIC. All rights reserved