LNP™ KONDUIT™ COMPOUND OX11315

OX11315

DESCRIPTION

LNP KONDUIT OX11315 is a compound based on PPS resin containing mineral. Added features include thermally conductive, electrically isolative and non-brominated, non-chlorinated FR.

TYPICAL PROPERTY VALUES

Revision 20200206

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	41	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	0.2	%	ASTM D 638
Tensile Modulus, 5 mm/min	30100	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	82	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	26500	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	54	MPa	ISO 527
Tensile Strain, break, 5 mm/min	0.3	%	ISO 527
Tensile Modulus, 1 mm/min	18380	MPa	ISO 527
Flexural Stress	84	MPa	ISO 178
Flexural Modulus, 2 mm/min	21380	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	54	J/m	ASTM D 4812
Izod Impact, notched, 23°C	16	J/m	ASTM D 256
Multiaxial Impact	1	J	ISO 6603
Instrumented Impact Total Energy, 23°C	5	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	3	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	1	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	275	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	242	°C	ASTM D 648
Specific Heat	1.26	J/g-°C	ASTM C 351
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	275	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	238	°C	ISO 75/Af
Relative Temp Index, Elec [1]	130	°C	UL 746B
Relative Temp Index, Mech w/impact [1]	130	°C	UL 746B
Relative Temp Index, Mech w/o impact [1]	130	°C	UL 746B
PHYSICAL			
Specific Gravity	1.78	-	ASTM D 792
Density	1.76	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.01	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.34	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.44	%	ASTM D 955

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Moisture Absorption (23°C / 50% RH)	0.01	%	ISO 62
ELECTRICAL			
Comparative Tracking Index [2]	400	V	IEC 60112
Surface Resistivity	2.4E+15	Ohm	ASTM D 257
Dielectric Strength, 1.6 mm	1.2	kV/mm	IEC 60243-1
FLAME CHARACTERISTICS [1]			
UL Yellow Card Link	E121562-101364448	-	-
UL Yellow Card Link 2	E207780-101069096	-	-
UL Recognized, 94-5VA Flame Class Rating	≥2.5	mm	UL 94
UL Recognized, 94V-0 Flame Class Rating	≥1	mm	UL 94
UV-light, water exposure/immersion	F1	-	UL 746C
INJECTION MOLDING			
Drying Temperature	120 – 150	°C	
Drying Time	4	hrs	
Melt Temperature	320 – 350	°C	
Front - Zone 3 Temperature	315 – 345	°C	
Middle - Zone 2 Temperature	315 – 345	°C	
Rear - Zone 1 Temperature	315 – 345	°C	
Mold Temperature	110 – 150	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	60 – 100	rpm	
Shot to Cylinder Size	50 – 75	%	

(1) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

(2) Value shown here is based on internal measurement.

DISCLAIMER