

LNPT[™] KONDUIT[™] COMPOUND OX11314

REGION EUROPE

DESCRIPTION

LNP KONDUIT OX11314 compound is based on Polyphenylene Sulfide (PPS) resin containing mineral and glass fiber. Added features of this grade include: Thermally Conductive, Electrically Insulative and Non-Brominated, Non-Chlorinated Flame Retardant.

GENERAL INFORMATION	
Features	Flame Retardant, Thermally Conductive, Non Cl/Br flame retardant, Thermally conductive/Electrically insulative, No PFAS intentionally added
Fillers	Glass Fiber, Mineral
Polymer Types	Polyphenylene Sulfide, Linear (PPS, Linear)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Building and Construction	Building Component
Consumer	Home Appliances
Electrical and Electronics	Mobile Phone - Computer - Tablets, Lighting
Industrial	Electrical, Material Handling

TYPICAL PROPERTY VALUES

Revision 20241025

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, break, 5 mm/min	50	MPa	ISO 527
Tensile Strain, break, 5 mm/min	0.5	%	ISO 527
Tensile Modulus, 1 mm/min	15000	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	75	MPa	ISO 178
Flexural Modulus, 2 mm/min	15500	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched 80*10*4 +23°C	6	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	2	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
CTE, -40°C to 40°C, flow	2.E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	3.E-05	1/°C	ASTM E831
CTE, -30°C to 80°C, flow	2.1E-05	1/°C	ISO 11359-2
CTE, -30°C to 80°C, xflow	3.2E-05	1/°C	ISO 11359-2
CTE, 23°C to 80°C, flow	2.2E-05	1/°C	ISO 11359-2
CTE, 23°C to 80°C, xflow	3.5E-05	1/°C	ISO 11359-2
Thermal Conductivity through-plane, 780*3mm discs	0.75	W/m-K	ISO 22007-2
Thermal Conductivity in-plane, 780*3mm discs	1.95	W/m-K	ISO 22007-2
Ball Pressure Test, 125°C +/- 2°C	PASSES	-	IEC 60695-10-2
Vicat Softening Temp, Rate B/120	254	°C	ISO 306

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	261	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	211	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Mold Shrinkage on Tensile Bar, flow ⁽²⁾	0.26	%	SABIC method
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.39	%	ISO 294
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	0.41	%	ISO 294
Density	1.91	g/cm ³	ISO 1183
ELECTRICAL ⁽¹⁾			
Surface Resistivity	1.E+15	Ω	ASTM D257
INJECTION MOLDING ⁽³⁾			
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) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.
- (2) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.
- (3) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

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