



LNP™ KONDUIT™ OTF2AXXP compound

General Information

Product Description

LNP* Konduit* OTF2AXXP is a compound based on Polyphenylene Sulfide resin containing Glass Fiber, Thermal Carbon Fiber. Added features of this material include: Thermally Conductive, Electrically Conductive.

Also known as: LNP* Konduit* Compound OTF-202-10

Product reorder name: OTF2AXXP

General

Filler / Reinforcement	• Glass\Carbon Fiber Reinforcement
Features	• Electrically Conductive • Thermally Conductive
Processing Method	• Injection Molding

ASTM and ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.74	g/cm ³	ASTM D792
Density	1.74	g/cm ³	ISO 1183
Molding Shrinkage - Flow (24 hr)	0.20	%	ASTM D955
Molding Shrinkage			ISO 294-4
Across Flow : 24 hr	0.47	%	
Flow : 24 hr	0.20	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	51800	MPa	ISO 527-2/1
Tensile Strength (Break)	143	MPa	ASTM D638
Tensile Stress (Break)	109	MPa	ISO 527-2
Tensile Elongation (Break)	0.80	%	ASTM D638
Tensile Strain (Break)	0.27	%	ISO 527-2
Flexural Modulus	41400	MPa	ASTM D790
Flexural Strength	200	MPa	ASTM D790
Coefficient of Friction			ASTM D3702 Modified
vs. Itself - Dynamic	0.25		
vs. Itself - Static	0.34		
Wear Factor - Washer	4.00	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D3702 Modified
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C)	32	J/m	ASTM D256
Notched Izod Impact Strength ² (23°C)	3.6	kJ/m ²	ISO 180/1A

LNP™ KONDUIT™ OTF2AXXP compound

SABIC Innovative Plastics Asia Pacific - Polyphenylene Sulfide

Impact	Nominal Value	Unit	Test Method
Unnotched Izod Impact (23°C)	270	J/m	ASTM D4812
Unnotched Izod Impact Strength ² (23°C)	12	kJ/m ²	ISO 180/1U
Instrumented Dart Impact (23°C, Energy at Peak Load)	3.60	J	ASTM D3763
Multi-Axial Instrumented Impact Energy	3.60	J	ISO 6603-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 1.8 MPa, Unannealed, 3.20 mm	272	°C	ASTM D648
Thermal Conductivity	2.2	W/m/K	ASTM E1530
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+2	ohm	ASTM D257
Flammability	Nominal Value	Unit	Test Method
Flame Rating (1.50 mm, Testing by SABIC)	V-0		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	121 to 149	°C
Drying Time	4.0	hr
Rear Temperature	304 to 316	°C
Middle Temperature	321 to 332	°C
Front Temperature	332 to 343	°C
Processing (Melt) Temp	316 to 321	°C
Mold Temperature	138 to 166	°C
Back Pressure	0.172 to 0.344	MPa
Screw Speed	30 to 60	rpm

Notes

¹ Typical properties: these are not to be construed as specifications.

² 80*10*4