

LNP™ THERMOCOMP™ UX04509 compound

Polyphthalamide

SABIC Innovative Plastics

Message:

LNP THERMOCOMP UX04509 is a compound based on Polyphthalamide resin containing Proprietary Filler(s). Added feature of this material is: Electrically Conductive.

Also known as: LNP* THERMOCOMP* Compound PDX-U-04509

Product reorder name: UX04509

General Information			
Filler / Reinforcement	Proprietary		
Features	Electrically Conductive		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity			ASTM D792
--	1.38	g/cm ³	
--	1.36	g/cm ³	
Molding Shrinkage			ASTM D955
Flow : 24 hr	0.20 to 0.50	%	
Across Flow : 24 hr	0.50 to 0.80	%	
Water Absorption			
24 hr, 50% RH	0.19	%	ASTM D570
Equilibrium, 23°C, 50% RH	0.29	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-- ¹	36800	MPa	ASTM D638
--	34400	MPa	ISO 527-2/1
Tensile Strength			
Yield ²	307	MPa	ASTM D638
Yield	293	MPa	ISO 527-2/5
Break ³	307	MPa	ASTM D638
Break	293	MPa	ISO 527-2/5
Tensile Elongation			
Yield ⁴	1.3	%	ASTM D638
Yield	1.1	%	ISO 527-2/5
Break ⁵	1.3	%	ASTM D638
Break	1.1	%	ISO 527-2/5
Flexural Modulus			
50.0 mm Span ⁶	29300	MPa	ASTM D790
-- ⁷	28800	MPa	ISO 178
Flexural Stress			

--	425	MPa	ISO 178
Yield, 50.0 mm Span ⁸	424	MPa	ASTM D790
Break, 50.0 mm Span ⁹	424	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			
23°C	70	J/m	ASTM D256
23°C ¹⁰	7.1	kJ/m ²	ISO 180/1A
Unnotched Izod Impact			
23°C	720	J/m	ASTM D4812
23°C ¹¹	47	kJ/m ²	ISO 180/1U
Instrumented Dart Impact			
23°C, Total Energy	6.20	J	ASTM D3763
--	2.90	J	ISO 6603-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed, 3.20 mm	303	°C	ASTM D648
0.45 MPa, Unannealed, 64.0 mm Span ¹²	301	°C	ISO 75-2/Bf
1.8 MPa, Unannealed, 3.20 mm	289	°C	ASTM D648
1.8 MPa, Unannealed, 64.0 mm Span ¹³	283	°C	ISO 75-2/Af
CLTE			ASTM D696
Flow : -30 to 30°C	2.8E-5	cm/cm/°C	
Transverse : -30 to 30°C	2.7E-5	cm/cm/°C	
Injection	Nominal Value	Unit	
Drying Temperature	121	°C	
Drying Time	4.0	hr	
Suggested Max Moisture	0.15	%	
Rear Temperature	310 to 321	°C	
Middle Temperature	316 to 327	°C	
Front Temperature	327 to 338	°C	
Processing (Melt) Temp	316 to 332	°C	
Mold Temperature	149 to 171	°C	
Back Pressure	0.172 to 0.344	MPa	
Screw Speed	30 to 60	rpm	
NOTE			
1.	50 mm/min		
2.	Type I, 5.0 mm/min		
3.	Type I, 5.0 mm/min		
4.	Type I, 5.0 mm/min		
5.	Type I, 5.0 mm/min		
6.	1.3 mm/min		
7.	2.0 mm/min		
8.	1.3 mm/min		

9.	1.3 mm/min
10.	80*10*4
11.	80*10*4
12.	80*10*4 mm
13.	80*10*4 mm

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Recommended distributors for this material

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