

LNP™ THERMOCOMP™ UC006H compound

Polyphthalamide

SABIC Innovative Plastics

Message:

LNP THERMOCOMP* UC006H is a compound based on Polyphthalamide resin containing 30% Carbon Fiber. Added features of this material include: Electrically Conductive, Healthcare.

Also known as: LNP* THERMOCOMP* Compound UC-1006

Product reorder name: UC006H

General Information			
Filler / Reinforcement	Carbon Fiber,30% Filler by Weight		
Features	Electrically Conductive		
Uses	Medical/Healthcare Applications		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.32	g/cm ³	ASTM D792, ISO 1183
Molding Shrinkage			
Flow : 24 hr	0.20	%	ASTM D955
Across Flow : 24 hr	0.60	%	ASTM D955
Across Flow : 24 hr	0.62	%	ISO 294-4
Flow : 24 hr	0.16	%	ISO 294-4
Water Absorption			
24 hr, 50% RH	0.31	%	ASTM D570
Equilibrium, 23°C, 50% RH	0.66	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-- ¹	26100	MPa	ASTM D638
--	28200	MPa	ISO 527-2/1
Tensile Strength			
Break	287	MPa	ASTM D638
Break	263	MPa	ISO 527-2
Tensile Elongation			
Break	1.5	%	ASTM D638
Break	1.3	%	ISO 527-2
Flexural Modulus			
--	22600	MPa	ASTM D790
--	22300	MPa	ISO 178
Flexural Strength			
--	420	MPa	ASTM D790
--	413	MPa	ISO 178
Coefficient of Friction			ASTM D3702 Modified

vs. Itself - Dynamic	0.27		
vs. Itself - Static	0.21		
Wear Factor - Washer	6.00	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D3702 Modified
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			
23°C	75	J/m	ASTM D256
23°C ²	6.4	kJ/m ²	ISO 180/1A
Unnotched Izod Impact			
23°C	830	J/m	ASTM D4812
23°C ³	52	kJ/m ²	ISO 180/1U
Instrumented Dart Impact			
23°C, Energy at Peak Load	8.91	J	ASTM D3763
--	2.30	J	ISO 6603-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed, 3.20 mm)	286	°C	ASTM D648
CLTE			
Flow : -40 to 40°C	1.8E-5	cm/cm/°C	ASTM E831
Flow : -40 to 40°C	1.9E-5	cm/cm/°C	ISO 11359-2
Transverse : -40 to 40°C	4.0E-5	cm/cm/°C	ASTM E831, ISO 11359-2
Injection	Nominal Value	Unit	
Drying Temperature	121 to 149	°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	138 to 166	°C	
Back Pressure	0.172 to 0.344	MPa	
Screw Speed	30 to 60	rpm	
NOTE			
1.	50 mm/min		
2.	80*10*4		
3.	80*10*4		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

