LNP™ THERMOTUF™ VC006 compound

Polyamide

SABIC Innovative Plastics

Message:

LNP THERMOTUF VC006 is a compound based on Super Tough Nylon resin containing 30% Carbon Fiber. Added features of this material include: High Impact, Electrically Conductive.
Also known as: LNP* THERMOTUF* Compound VC-1006
Product reorder name: VC006

General Information			
Filler / Reinforcement	Carbon Fiber,30% Filler by Weight		
Features	High Impact Resistance Ultra High Toughness		
Processing Method	Injection Molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.21	g/cm³	ASTM D792
Molding Shrinkage			ASTM D955
Flow : 24 hr	0.25	%	
Across Flow : 24 hr	1.0	%	
Water Absorption			
24 hr, 50% RH	0.62	%	ASTM D570
Equilibrium, 23°C, 50% RH	0.95	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus			
-- [1]	20700	MPa	ASTM D638
--	19300	MPa	ISO 527-2/1
Tensile Strength			
Yield [2]	197	MPa	ASTM D638
Yield	193	MPa	ISO 527-2/5
Break [3]	197	MPa	ASTM D638
Break	193	MPa	ISO 527-2/5
Tensile Elongation			
Yield [4]	2.9	%	ASTM D638
Yield	2.9	%	ISO 527-2/5
Break [5]	2.9	%	ASTM D638
Break	2.9	%	ISO 527-2/5
Flexural Modulus			
50.0 mm Span [6]	15300	MPa	ASTM D790
-- [7]	15500	MPa	ISO 178
Flexural Stress			

--	284	MPa	ISO 178
Yield, 50.0 mm Span [8]	293	MPa	ASTM D790
Break, 50.0 mm Span [9]	286	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact			
23°C	210	J/m	ASTM D256
23°C [10]	21	kJ/m²	ISO 180/1A
Unnotched Izod Impact			
23°C	1100	J/m	ASTM D4812
23°C [11]	75	kJ/m²	ISO 180/1U
Instrumented Dart Impact			
23°C, Total Energy	32.6	J	ASTM D3763
--	7.80	J	ISO 6603-2
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			
0.45 MPa, Unannealed, 3.20 mm	261	°C	ASTM D648
0.45 MPa, Unannealed, 64.0 mm Span [12]	258	°C	ISO 75-2/Bf
1.8 MPa, Unannealed, 3.20 mm	252	°C	ASTM D648
1.8 MPa, Unannealed, 64.0 mm Span [13]	240	°C	ISO 75-2/Af
CLTE			ASTM D696
Flow : -30 to 30°C	3.4E-5	cm/cm/°C	
Transverse : -30 to 30°C	1.0E-4	cm/cm/°C	
Injection	**Nominal Value**	**Unit**	
Drying Temperature	82.2	°C	
Drying Time	4.0	hr	
Suggested Max Moisture	0.15	%	
Rear Temperature	260 to 271	°C	
Middle Temperature	277 to 288	°C	
Front Temperature	293 to 304	°C	
Processing (Melt) Temp	282 to 293	°C	
Mold Temperature	93.3 to 110	°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

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