

LNP™ THERMOCOMP™ AC003 compound

Acrylonitrile Butadiene Styrene

SABIC Innovative Plastics

Message:

LNP* THERMOCOMP* AC003 is a compound based on ABS containing 15% Carbon Fiber.

Also known as: LNP* THERMOCOMP* Compound AC003

Product reorder name: AC003

General Information			
Filler / Reinforcement	Carbon Fiber, 15% Filler by Weight		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.14	g/cm ³	ASTM D792
Molding Shrinkage			ASTM D955
Flow : 24 hr	0.10	%	
Across Flow : 24 hr	0.55	%	
Water Absorption			
24 hr, 50% RH	0.19	%	ASTM D570
Equilibrium, 23°C, 50% RH	0.28	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-- ¹	12800	MPa	ASTM D638
--	11500	MPa	ISO 527-2/1
Tensile Strength			
Break ²	92.0	MPa	ASTM D638
Break	93.0	MPa	ISO 527-2/5
Tensile Elongation			
Break ³	0.90	%	ASTM D638
Break	0.90	%	ISO 527-2/5
Flexural Modulus			
50.0 mm Span ⁴	12600	MPa	ASTM D790
-- ⁵	12300	MPa	ISO 178
Flexural Stress			
--	119	MPa	ISO 178
Yield, 50.0 mm Span ⁶	114	MPa	ASTM D790
Break, 50.0 mm Span ⁷	95.0	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			
23°C	60	J/m	ASTM D256
23°C ⁸	5.0	kJ/m ²	ISO 180/1A
Unnotched Izod Impact			

23°C	270	J/m	ASTM D4812
23°C ⁹	16	kJ/m ²	ISO 180/1U
Instrumented Dart Impact			
23°C, Total Energy	7.10	J	ASTM D3763
--	2.18	J	ISO 6603-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed, 3.20 mm	105	°C	ASTM D648
0.45 MPa, Unannealed, 64.0 mm Span ¹⁰	104	°C	ISO 75-2/Bf
1.8 MPa, Unannealed, 3.20 mm	102	°C	ASTM D648
1.8 MPa, Unannealed, 64.0 mm Span ¹¹	104	°C	ISO 75-2/Af
CLTE			ASTM D696
Flow : -30 to 30°C	1.9E-5	cm/cm/°C	
Transverse : -30 to 30°C	6.6E-5	cm/cm/°C	
Injection	Nominal Value	Unit	
Drying Temperature	82.2	°C	
Drying Time	4.0	hr	
Suggested Max Moisture	0.050 to 0.10	%	
Rear Temperature	204 to 216	°C	
Middle Temperature	232 to 243	°C	
Front Temperature	266 to 277	°C	
Processing (Melt) Temp	260	°C	
Mold Temperature	71.1 to 82.2	°C	
Back Pressure	0.172 to 0.344	MPa	
Screw Speed	30 to 60	rpm	
NOTE			
1.	5.0 mm/min		
2.	Type I, 5.0 mm/min		
3.	Type I, 5.0 mm/min		
4.	1.3 mm/min		
5.	2.0 mm/min		
6.	1.3 mm/min		
7.	1.3 mm/min		
8.	80*10*4		
9.	80*10*4		
10.	80*10*4 mm		
11.	80*10*4 mm		

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

