

LNP™ THERMOCOMP™ 5E003M compound

Polyvinylidene Fluoride
SABIC Innovative Plastics

Technical Data		
Product Description		
LNP* 5E003M is a compound based on PVDF resin containing 15% Milled Carbon Fiber.		
Also known as: LNP* Thermocomp* Compound FP-VC-1003 M Product reorder name: 5E003M		
General		
Material Status	• Commercial: Active	
Literature ¹	• Technical Datasheet	
Search for UL Yellow Card	• SABIC Innovative Plastics • LNP™ THERMOCOMP™	
Availability	• North America	
Filler / Reinforcement	• Milled Carbon Fiber, 15% Filler by Weight	
Processing Method	• Injection Molding	
Physical		
	Nominal Value Unit	Test Method
Specific Gravity	1.76 g/cm³	ASTM D792
Molding Shrinkage		ASTM D955
Flow: 24 hr	1.0 to 3.0 %	
Across Flow: 24 hr	1.0 to 3.0 %	
Water Absorption		
24 hr, 50% RH	0.040 %	ASTM D570
Equilibrium, 23°C, 50% RH	0.050 %	ISO 62
Mechanical		
	Nominal Value Unit	Test Method
Tensile Modulus		
-- ³	9060 MPa	ASTM D638
--	7460 MPa	ISO 527-2/1
Tensile Strength		
Yield ⁴	50.0 MPa	ASTM D638
Yield	49.0 MPa	ISO 527-2/5
Break ⁴	47.0 MPa	ASTM D638
Break	46.0 MPa	ISO 527-2/5
Tensile Elongation		
Yield ⁴	3.5 %	ASTM D638
Yield	3.4 %	ISO 527-2/5
Break ⁴	6.8 %	ASTM D638
Break	6.1 %	ISO 527-2/5
Flexural Modulus		
50.0 mm Span ⁵	5470 MPa	ASTM D790
-- ⁶	6590 MPa	ISO 178
Flexural Strength		
--	79.0 MPa	ISO 178
Yield, 50.0 mm Span ⁵	79.0 MPa	ASTM D790
Impact		
	Nominal Value Unit	Test Method
Notched Izod Impact		
23°C	59 J/m	ASTM D256
23°C ⁷	5.5 kJ/m²	ISO 180/1A
Unnotched Izod Impact		
23°C	430 J/m	ASTM D4812
23°C ⁷	27 kJ/m²	ISO 180/1U