

LNP* Thermocomp* HX03409C

Polyamide 11
SABIC Innovative Plastics

Technical Data

Product Description

LNP* THERMOCOMP* HX03409C is a compound based on PA11 resin containing Metal Filler. Added features include: Clean Compound System, High Specific Gravity.

General

Material Status	• Commercial: Active	
Literature ¹	• Technical Datasheet	
Search for UL Yellow Card	• SABIC Innovative Plastics • LNP* Thermocomp*	
Availability	• North America	
Filler / Reinforcement	• Metal	
Features	• High Specific Gravity	• Low (to None) Ion Content
Processing Method	• Injection Molding	

Physical	Nominal Value Unit	Test Method
Density	2.24 g/cm³	ISO 1183
Molding Shrinkage - Flow	1.8 %	Internal Method
Water Absorption (23°C, 24 hr)	0.10 %	ISO 62

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	1500 MPa	ISO 527-2/1
Tensile Stress (Yield)	33.0 MPa	ISO 527-2/50
Tensile Strain (Break)	42 %	ISO 527-2/50
Flexural Modulus ³	1900 MPa	ISO 178
Flexural Strength ^{3, 4}	51.0 MPa	ISO 178

Impact	Nominal Value Unit	Test Method
Notched Izod Impact Strength ⁵ (23°C)	8.0 kJ/m²	ISO 180/1A
Unnotched Izod Impact Strength ⁵ (23°C)	75 kJ/m²	ISO 180/1U

Thermal	Nominal Value Unit	Test Method
Heat Deflection Temperature ⁶		
0.45 MPa, Unannealed, 64.0 mm Span	146 °C	ISO 75-2/Bf
1.8 MPa, Unannealed, 64.0 mm Span	50.0 °C	ISO 75-2/Af
CLTE		ISO 11359-2
Flow: 23 to 60°C	0.00014 cm/cm/°C	
Transverse: 23 to 60°C	0.00011 cm/cm/°C	

Injection	Nominal Value Unit
Drying Temperature	82.2 °C
Drying Time	4.0 hr
Suggested Max Moisture	0.15 %
Rear Temperature	199 to 210 °C
Middle Temperature	232 to 243 °C
Front Temperature	260 to 271 °C
Processing (Melt) Temp	227 to 260 °C
Mold Temperature	43.3 to 54.4 °C
Back Pressure	0.172 to 0.344 MPa
Screw Speed	30 to 60 rpm