

Technical Data

Product Description

NILAMID® B3 N is an unfilled nucleated easy flow Polyamide 6 (Nylon 6) compound.

This compound is intended for injection molding.

NILAMID® B3 N is primarily designed for the Automotive industry. It is also suitable for Electrical and Electronic or Industrial & Consumer applications.

General

Material Status	• Commercial: Active		
Search for UL Yellow Card	• Celanese Corporation • NILAMID®		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Nucleating Agent		
Features	• Good Flow	• Nucleated	
Uses	• Automotive Applications • Consumer Applications	• Electrical/Electronic Applications • Industrial Applications	
Processing Method	• Injection Molding		

Physical	Nominal Value Unit	Test Method
Density (23°C)	1.13 g/cm ³	ISO 1183
Molding Shrinkage		ISO 294-4
Across Flow : 23°C	1.8 %	
Flow : 23°C	1.5 %	
Water Absorption		ISO 62
24 hr, 23°C	3.0 %	
Saturation, 23°C	9.0 %	

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus (23°C)	3350 MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	85.0 MPa	ISO 527-2
Tensile Strain (Break, 23°C)	7.0 %	ISO 527-2

Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength		ISO 179/1eA
-30°C	3.0 kJ/m ²	
23°C	4.0 kJ/m ²	
Charpy Unnotched Impact Strength		ISO 179/1eU
-30°C	No Break	
23°C	No Break	

Thermal	Nominal Value Unit	Test Method
Heat Deflection Temperature		
0.45 MPa, Unannealed	160 °C	ISO 75-2/B
1.8 MPa, Unannealed	65.0 °C	ISO 75-2/A
Continuous Use Temperature ²	85.0 °C	IEC 60216
Ball Pressure Test		IEC 60695-10-2
125°C	Pass	
165°C	Pass	

Electrical	Nominal Value Unit	Test Method
Surface Resistivity ³	1.0E+14 ohms	IEC 60093
Volume Resistivity (23°C)	1.0E+15 ohms·cm	IEC 60093
Comparative Tracking Index		IEC 60112
3.20 mm, Solution A	600 V	



Flammability	Nominal Value Unit	Test Method
Flame Rating		UL 94
0.40 mm	V-2	
0.8 mm	V-2	
1.6 mm	V-2	
3.2 mm	V-2	

Notes

¹ Typical properties: these are not to be construed as specifications.

² 20000 hr

³ 23°C



Where to Buy

Supplier

Celanese Corporation
Florence, KY USA
Telephone: 800-833-4882
Web: <http://www.celanese.com/engineered-materials>

Distributor

ESSE International - OMYA
ESSE International - OMYA is a Pan European distribution company. Contact ESSE International - OMYA for availability of individual products by country.
Telephone: +33-1-30-80-56-56
Web: <http://www.omya.com>
Availability: Portugal, Spain

