

Nilamid® B3 D

Polyamide 6

Celanese Corporation

PROSPECTOR®

www.ulprospector.com

Technical Data

Product Description

NILAMID® B3 D is an unfilled easy flow Polyamide 6 (Nylon 6) compound, impact modified, UL listed HB.

This compound is intended for injection molding.

NILAMID® B3 D is primarily designed for the Automotive industry. It is also suitable for Industrial & Consumer applications.

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet (English) • Technical Datasheet (German) • Technical Datasheet (Italian)
UL Yellow Card ²	• E86034-251981 • E172252-103621739 • E331274-103610529
Search for UL Yellow Card	• Celanese Corporation • Nilamid®
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Features	• Good Flow • Good Impact Resistance
Uses	• Automotive Applications • Consumer Applications • Industrial Applications
Processing Method	• Injection Molding

Physical	Nominal Value Unit	Test Method
Density (23°C)	1.11 g/cm ³	ISO 1183
Molding Shrinkage		ISO 294-4
Across Flow : 23°C	1.9 %	
Flow : 23°C	1.7 %	
Water Absorption		ISO 62
24 hr, 23°C	2.5 %	
Saturation, 23°C	8.5 %	

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus (23°C)	3000 MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	70.0 MPa	ISO 527-2
Tensile Strain (Break, 23°C)	15 %	ISO 527-2

Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength (23°C)	5.0 kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength (23°C)	No Break	ISO 179/1eU

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 ⁴	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 ⁵	1.0E+12 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
0.8 mm	HB	
1.6 mm	HB	
3.2 mm	HB	

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

³ Typical properties: these are not to be construed as specifications.

⁴ 20000 hr

⁵ 23°C



Where to Buy

Supplier

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

Distributor

SNETOR Distribution
SNETOR Distribution is a Pan European distribution company. Contact SNETOR for availability of individual products by country.
Telephone: +33-1-4904-8888
Web: <http://www.snetor.com/>
Availability: Czech Republic, France, Hungary, Poland, Slovenia, Ukraine, United Kingdom

