

Nilamid® A3 GF30

Polyamide 66

Celanese Corporation

PROSPECTOR®

www.ulprospector.com

Technical Data

Product Description

NILAMID® A3 GF30 is a Polyamide 66 (Nylon 66) compound 30% glass fiber reinforced, heat stabilized, UL listed HB.

This compound is intended for injection molding.

NILAMID® A3 GF30 is primarily designed for the Automotive industry. It is also suitable for Electrical and Electronic or Industrial & Consumer applications.

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet (English) • Technical Datasheet (German) • Technical Datasheet (Italian)
UL Yellow Card ²	• E86034-102512454
Search for UL Yellow Card	• Celanese Corporation • Nilamid®
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Additive	• Heat Stabilizer
Features	• Heat Stabilized • High Flow
Uses	• Automotive Applications • Consumer Applications • Electrical/Electronic Applications • Industrial Applications
Processing Method	• Injection Molding

Physical

	Nominal Value Unit	Test Method
Density (23°C)	1.37 g/cm ³	ISO 1183
Molding Shrinkage		ISO 294-4
Across Flow : 23°C	0.75 %	
Flow : 23°C	0.40 %	
Water Absorption		ISO 62
24 hr, 23°C	1.1 %	
Saturation, 23°C	5.8 %	

Mechanical

	Nominal Value Unit	Test Method
Tensile Modulus (23°C)	9800 MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	185 MPa	ISO 527-2
Tensile Strain (Break, 23°C)	2.8 %	ISO 527-2

Impact

	Nominal Value Unit	Test Method
Charpy Notched Impact Strength		ISO 179/1eA
-30°C	10 kJ/m ²	
23°C	14 kJ/m ²	
Charpy Unnotched Impact Strength		ISO 179/1eU
-30°C	43 kJ/m ²	
23°C	58 kJ/m ²	
Notched Izod Impact Strength		ISO 180/A
-30°C	8.0 kJ/m ²	
23°C	12 kJ/m ²	



Nilamid® A3 GF30

Polyamide 66

Celanese Corporation

PROSPECTOR®

www.ulprospector.com

Thermal	Nominal Value Unit	Test Method
Heat Deflection Temperature		
0.45 MPa, Unannealed	255 °C	ISO 75-2/B
1.8 MPa, Unannealed	245 °C	ISO 75-2/A
Continuous Use Temperature ⁴	130 °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+13 ohms	IEC 60093
Volume Resistivity (23°C)	1.0E+15 ohms·cm	IEC 60093
Electric Strength (2.00 mm)	21 kV/mm	IEC 60243-1
Comparative Tracking Index		IEC 60112
3.20 mm, Solution A	500 V	
Flammability	Nominal Value Unit	Test Method
Flame Rating		UL 94
0.8 mm	HB	
1.6 mm	HB	
3.2 mm	HB	
Glow Wire Flammability Index		IEC 60695-2-12
0.8 mm	650 °C	
3.2 mm	650 °C	
Oxygen Index	24 %	ISO 4589-2
Flammability ⁶	B32	FMVSS 302

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

⁶ 355x100x1mm



Nilamid® A3 GF30

Polyamide 66

Celanese Corporation

PROSPECTOR®

www.ulprospector.com

Where to Buy

Supplier

Celanese Corporation

Florence, KY USA

Telephone: 800-833-4882

Web: <http://www.celanese.com/engineered-materials>

Distributor

Please contact the supplier to find a distributor for Nilamid® A3 GF30

