



CHEMPLAX LLC

A KMI Group Company

Technical Data Sheet

Nylux GF40 PA6 Black

40% Long Strand Glass Fiber Reinforced Nylon 6 Natural

Product Description

Nylux GF40 PA6 Black is a 40% long strand glass fiber reinforced Nylon 6 Natural that has characteristics that are good for processing and injection molding.

Revision

Revision Date: 6/26/2025

Properties	Method	Value
dry / cond.		
Density	ISO 1183	1450 kg/m ³
Tensile Properties	ISO 527-1/-2	
Tensile Modulus		13000/10200 MPa
Tensile Stress @ Break, 5mm/min		205/147 MPa
Tensile Strain @ Break, 5mm/min		1.9/2.2 %
Flexural Properties	ISO 178	
Flexural Modulus		12000/8900 MPa
Flexural Strength		320/230 MPa

Charpy Impact Strength	ISO 179/1eU	
23° C		78/76 kJ/m ²
-30° C		62 kJ/m ²
Charpy Notched Impact Strength	ISO 179/1eA	
23° C		27/28 kJ/m ²
-30° C		26 kJ/m ²
Temperature of Deflection Under Load	ISO 75-1/-2	
1.8 MPa		210° C
Coefficient of Linear Thermal Expansion	ISO 11359-1/-2	
CLTE, Normal		97 E-6/K
CLTE, Parallel		28 E-6/K

Notes

Injection Molding

Preprocessing:

GF40 PA6 Black drying requirements: 4 hrs @ 80° C. (A dehumidifier or desiccant dryer is recommended).

Processing:

Nylux GF40 PA6 Black can be processed on a standard injection molding unit. A general purpose metering screw is recommended with a zone distribution of 40% feed, 40% transition, and 20% metering. A free-flowing check ring assembly is recommended.

Melt Temp: 275-285° C

Mold Temp: 85-95° C

Processing

Pre-Drying:

Nylux GF40 PA6 Black should, in principle, be pre-dried. Because of the necessary low maximum residual moisture content, the use of dry air dryers is recommended.

The dew point should be $\leq -30^{\circ}\text{C}$. The time between drying and processing should be as short as possible.

Storage

Material can be over-dried and may discolor.

For additional inquiries, please contact: csr.supplychain@kmigroup.com

TECHNICAL INFORMATION AND DATA REGARDING THE COMPOSITION, PROPERTIES OR USE OF THE PRODUCTS DESCRIBED HERE IS BELIEVED RELIABLE. HOWEVER NO REPRESENTATION OR WARRANTY IS MADE WITH RESPECT THERETO EXCEPT AS MADE BY CHEMPLAX LLC IN WRITING AT TIME OF SALE. CHEMPLAX LLC CANNOT ASSUME RESPONSIBILITY FOR ANY PATENT LIABILITY WHICH MAY RISE FROM THE USE OF ANY PRODUCT IN A PROCESS, MANNER OR FORMULA NOT DESIGNED BY CHEMPLAX LLC.