

# DATASHEET

## NYLON 66 GF

Nylon 66 GF is a 30% glass-fibre reinforced grade that offers increased strength, stiffness, creep resistance, and dimensional stability, while also maintaining its excellent wear resistance properties.

### Applications

- Sleeve & Slide Bearings
- Wear Pads
- Support & Guide Wheel
- Conveyor Rollers & Tension Rollers
- Pulleys & Pulley Linings
- Buffer Blocks

### Availability

- Colour – Black
- Type – Sheets, Rods & Tubes
- Regularly produced in a wide variety of thicknesses

### Typical Properties

General Properties	Method	Unit	Test Result
<b>Physical Properties</b>			
Colour	-	-	Black
Density	ISO 1183-1	g/cm <sup>3</sup>	1.29
Water Absorption:			
- After 24h immersion in water of 23°C	ISO 62	mg	0.39
- At saturation in water of 23°C	-	%	5.5
<b>Thermal Properties</b>			
Melting Temperature (DSC, 10°C/min)	ISO 11357 – 1/-3	°C	260
Glass Transition Temperature (DSC, 10°C/min)	ISO 11357 – 1/-2	°C	-
Thermal Conductivity at 23°C	-	W/(K.m)	0.3
Coefficient of Linear Thermal Expansion:			
- Average value between 23 and 100°C	-	W/(K.m)	50
- Average value between 23 and 150°C	-	W/(K.m)	60
- Average value above 150°C	-	W/(K.m)	-
Temperature of Deflection Under Load:			
- Method A: 1.8 MPa	ISO 75-1/-2	°C	150
Max Allowable Service Temperature in Air:			
- Continuously: for 5,000 to 20,000h	-	°C	110
Minimum Service Temperature	-	°C	-20
Flammability:			

- According to UL94 (3/6mm thickness)	-	-	V-2
<b>Mechanical Properties</b>			
Tension Test:			
- Tensile Strength	ISO 527-1/-2	MPa	85
- Tensile Strain at Yield	ISO 527-1/-2	%	-
- Tensile Strain at Break	ISO 527-1/-2	%	5
- Tensile Modulus of Elasticity	ISO 527-1/-2	MPa	5000
Flexural Test:			
- Flexural Strength	ISO 178	MPa	-
- Flexural Modulus of Elasticity	ISO 178	MPa	-
Compression Test:			
- Compressive Stress @ 1/2/5% Nominal Strain	ISO 604	MPa	43/77/112
Charpy Impact Strength - Unnotched	ISO 179-1-1eU	kJ/m <sup>2</sup>	50
Charpy Impact Strength - Notched	ISO 179-1-1eU	kJ/m <sup>2</sup>	6
Rockwell Hardness	ISO 2039-2	-	76
Dynamic Coefficient of Friction	ISO 7148-2(15)	-	0.25-0.4
Wear Rate	ISO 7148-2(15)	Um/km	11
<b>Electrical Properties</b>			
Electric Strength	EC 60243-1	kV/mm	27
Volume Resistivity	IEC 60093	Ohm.cm	10E 13
Surface Resistivity	IEC 60093	Ohm	10E 12
Relative Permittivity – at 1MHz	IEC 60250	-	-
Dielectric Dissipation Factor – at 1 MHz	IEC 60250	-	0.014