

Nylon 6 LFX

Material Information



Nylon 6 LFX

Product full identity:

[Nylon 6 LFX](#)

Nylon 6 LFX oil-filled offers self-lubricating properties for higher loads and slow moving parts. This grade also offers a lower coefficient of friction compared to all other Nylon 6 grades available.

Properties

- Self-lubricating
- Good sliding properties
- High-strength, stiffness and hardness
- High wear resistance
- Good machinability

Applications

- Bearings
- Wear guides
- Conveyor components

Forms



Solid Rod



Sheet

Nylon 6 LFX

Technical Properties

Physical	Unit	Test Method	Result
Specific gravity	g/cm ³	ISO 1183-1	1.14
Water absorption until saturation at 23°C	%	ISO 62	6.30
Maximum service temp. Upper temp limit – short term	°C	-	-
Maximum service temp. Upper temp limit – long term	°C	-	90
Lower temp limit	°C	-	-20
Mechanical	Unit	Test Method	Result
Tensile strength	MPa	ISO 527-1/-2	73
Elongation at yield	%	ISO 527-1/-2	5
Tensile strength at break	MPa	ISO 527-1/-2	25
Unnotched impact strength	kJ/m ²	ISO 179-1/1eU	50
Notch impact strength	kJ/m ²	ISO 179-1/1eA	4
Ball indentation / Rockwell hardness	MPa	ISO 2039-1/2039-2	M82
Shore-D		ISO 868	76
Flexural modulus of elasticity	MPa	ISO 178	3000
Tensile modulus of elasticity	MPa	ISO 527-1/-2	3000
Thermal	Unit	Test Method	Result
Vicat-softening point VST/B/50	°C	-	-
Heat deflection temperature HDT/B	°C	ISO 75-1/-2	75
Coefficient of linear thermal expansion 23 – 100°C	m/(m.K)	-	90
Thermal conductivity at 23°C	W/mK	-	0.28
Electrical	Unit	Test Method	Result
Volume resistivity	Ω x m	IEC 62631-3-1	>10 ¹⁴
Surface resistivity	Ω	ANSI/ESD STM 11.11	>10 ¹³
Insulation resistivity	Ω . cm	-	-
Dielectric constant at 1MHz		IEC 62631-2-1	3.1
Dielectric loss factor at 1MHz		IEC 62631-2-1	0.016
Dielectric strength	kV/mm	IEC 60243-1	22
Comparative tracking index (CTI)		-	-
Additional Data	Unit	Test Method	Result
Bondability		-	-
Food compliance – FDA		FDA	No
Food compliance – EU		EU 10/201	No
Antistatic		-	-
Flammability	Unit	Test Method	Result
Fire performance		UL 94	HB
Optical	Unit	Test Method	Result
N/A	N/A	N/A	N/A

All information provided in this Product Datasheet is for guide purposes only. The data has been taken from standard test results provided by our manufacturers.