

Technical Data Sheet

Nylon 6 Sheet & Rod - Cast

Oil Filled

Nylon 6 Cast (Modified) nylon 6 of green / yellow: internally lubricated with mineral oil filler, which improves friction coefficient by up to 50%, and wear resistance tenfold.

Moisture absorption is significantly improved. Ideally suited for more arduous tasks, such as high load, slow speed and dry running applications where standard nylon 6 would not perform effectively. Due to its lower coefficient of friction and the resulting improved heat build-up in sliding applications, nylon 6 of can operate with higher loads and speeds than other thermoplastics.

product information

Name: Cast Polyamide 6

Other names: Ertalon 6 PLA Abbreviation: Nylon 6 Cast

Key characteristics

- Better lubrication than MoS2
- Self lubricating
- High loaded and slow moving parts
- Reduced coefficient of friction up to 50%
- Better wear resistance

Applications

- Chain guides
- Bearings
- Wear pads
- Cams
- Conveyor parts
- Gears



PLASTICS



Certificate Number: 14352
ISO 9001



Care should be taken in selecting the most suitable quality for each application. Advice is available, but final responsibility remains with the customer.

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United Kingdom

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Physical Properties

	Test	Unit	Result
1. Specific gravity	ISO 1183	g/cm ³	0.93
2. Water absorption till saturation 23° C	-	%	6.3
3. Maximum service temp. Upper temp limit (no stronger mechanical stress involved)	Short Term	°C	165
	Long Term	°C	105
Lower temp limit	-	°C	-20

Mechanical Properties

	Test	Unit	Result
1. Tensile strength at yield	ISO 527-1/-2	Mpa	72/-
2. Elongation at yield	-	%	-
3. Tensile strain at break	ISO 527-1/-2	%	25
4. Unnotched impact strength	ISO 179-1/1eU	kJ/m ²	50
5. Notch impact strength	ISO 179-1/1eA	kJ/m ²	4
6. Unnotched impact strength	ISO 179-1/1eU	kJ/m ²	50
7. Ball indentation / Rockwell hardness	ISO 2039-1/-2	Mpa	145/M82
8. Shore-D	DIN 53505	-	-
9. Flexural modulus of elasticity	-	Mpa	-
10. Tensile modulus of elasticity	ISO 527-1/-2	Mpa	3000

Thermal Properties

	Test Method	Unit	Result
1. Vicat-softening point VST/B/50	-	°C	-
2. Heat deflection temperature HDT/A	ISO 75-1/-2	°C	75
3. Coefficient of linear thermal expansion 23 - 100°C	-	m/(m.K)	90x10 ⁻⁶
4. Thermal conductivity at 23 °C	-	W/(m*K)	0.28

Electrical Properties

	Test Method	Unit	Result
1. Volume resistivity	IEC 6093	Ω x m	> 10 ¹⁴
2. Surface resistivity	IEC 6093	Ω	> 10 ¹³
3. Dielectric constant at 1MHz	-	-	-
4. Dielectric dissipation factor at 1 MHz	IEC 60250	10 ⁶ Hz	0.016
5. Electrical strength	IEC 60243-1	kV/mm	22
6. Comparative tracking index (CTI)	IEC 60112	-	600

Additional Data

	Test Method	Unit	Result
1. Bondability	-	-	-
2. Food compliance	FDA	-	-
3. Flammability	UL94	-	HB

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

Key		
Yes	Limited	No or no data
+	0	-

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