

Technical Data Sheet

NYLATRON® GSM

Black

Nylatron® GSM contains finely divided particles of molybdenum disulphide to enhance its bearing and wear behaviour without impairing the impact and fatigue resistance inherent to unmodified cast nylon grades.

product information

Name: Nylatron® GSM
Categories: Polymer; Thermoplastic; Nylo; Nylon 6; Nylon 6 MoS2 Filled
Key Words: PA 6, Polyamide

key characteristics

- High mechanical strength, stiffness, hardness and toughness
- Good fatigue resistance
- High mechanical damping ability
- Good sliding properties
- Excellent wear resistance
- Good electrical insulating properties
- Good resistance to high energy radiation (gamma- and X-rays)
- Good machinability

applications

- Gears
- Bushes
- Bearings
- Sheaves
- Sprockets



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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NYLATRON® GSM

Physical Properties

	Test	Unit	Result
1. Specific gravity	ASTM D792	g/cc	1.16
2. Water absorption	ASTM D570 (2)	%	0.6
3. Maximum service temp. (Air)	Long Term	°C	93.3
4. Melting point	ASTM D3418	°C	216

Mechanical Properties

	Test	Unit	Result
1. Tensile strength	ASTM D638	Mpa	75.8
2. Tensile strength @ 65°C	ASTM D638	Mpa	41.4
3. Shear strength	ASTM D256-A	J/cm	0.267
4. Elongation at break	ASTM D638	%	30
5. Izod Impact. Notched	ASTM D256-A	J/cm	0.267
6. Compressive strength (10% deflection)	ASTM D695	Mpa	96.5
7. Compressive modulus	ASTM D695	Gpa	2.76
8. Shore-D	ASTM D2240	-	85
9. Flexural strength	ASTM D790	Mpa	110
10. Flexural modulus	ASTM D790	Gpa	3.45
11. Coefficient of friction. Dynamic	QTM55007	Dry vs Steel	0.20
12. Limiting pressure velocity 4:1 safety factor	QTM55007	Mpa-m/sec	0.105

Thermal Properties

	Test Method	Unit	Result
1. CTE. Liner	ASTM E831	µm/m-°C	90.0

Electrical Properties

	Test Method	Unit	Result
1. Surface resistivity per square	EOS/ESD S11.11	Ω	>=1.00e+13
2. Dielectric constant	ASTM D150	-	3.7

Additional Data

	Test Method	Unit	Result
1. Bondability	-	-	-
2. Food compliance	FDA	-	-
3. Flammability (Estimated rating)	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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