



MATERIAL DATA SHEET

PA6 | FDA

GENERAL INFORMATION

PA6 | FDA is a casted high molecular and high crystalline polyamide, commonly known as Nylon or Polyamide. PA6 | FDA is one of the most important engineering plastics with excellent mechanical properties, low stress, low coefficient of friction and good abrasion resistance. PA6 | FDA is mainly used in mineral oils and is suitable for applications in contact with foodstuff. PA6 | FDA is optimized in regards to moisture absorption (leads to swelling and the loss of physical properties for normal PA), and maintains stable mechanical properties.

PA6 | FDA is approved and corresponds to foodgrade standards.

MECHANICAL | ELECTRICAL | THERMAL PROPERTIES

Colour:			off white
Hardness at 20°:	DIN 53505	Shore D	85
Density:	ISO 1183	g/cm ³	1.03
Tensile strength:	EN ISO 527-2	N/mm ²	> 60
Elongation at break:	EN ISO 527-2	%	> 55
Modulus of elasticity:	EN ISO 527-2	N/mm ²	2200
Charpy impact strength:	EN ISO 179	kJ/m ²	> -
Compr. strength at 1% deform.:	ASTM D695	N/mm ²	-
Coefficient of friction (dyn.):	ASTM D1894	μ	< 0.4
Water absorbtion to saturation:	EN ISO 62	%	< 1.2
Moisture absorbtion to saturation:	DIN 53715	%	< 0.9
Dielectric strength:	EN IEC 60243	kV/mm	50
Volume resistivity:	EN IEC 60093	Ω*cm	> 10 ¹⁶
Surface resistivity:	EN IEC 60093	Ω	> 10 ¹³
Coefficient of therm. expansion:		1/K*10 ⁶	10-11
Min. service temperature:		°C	- 60
Max. service temperature (short term):		°C	+ 110 (+150)

REMARK

All test methods and values stated above are corresponding to ASTM | DIN | ISO standards and have been tested on standardized plates in the laboratory. All tests are made under laboratory conditions.

This information does not except our customers to test our products for its suitability for the intended application.

Utilization, processing and application of our products are out of our control and therefore our customers responsibility, also in terms of any protective rights of any third party.