

Material Data Sheet

UTECMID-1

General Information

UTECMID-1 is a casted polyamide, commonly known as Nylon or PA. PA is one of the most important engineering plastics with excellent mechanical properties, low coefficient of friction and good abrasion resistance. UTECMID-1 is mainly used in mineral oils and is suitable for applications in contact with foodstuff. Because of high moisture absorption, which leads to swelling and the loss of physical properties, it is not recommended the use PA in water.

Physical properties

Colour:			natural
Hardness at 20°:	DIN 53505	Shore D	85
Density:	DIN 53479	g/cm ³	1.15
Tensile strength:	DIN 53504	N/mm ²	> 85
Elongation at break:	DIN 53504	%	> 25
Modulus of elasticity test :	DIN 53457	N/mm ²	2760
Coefficient of friction (dyn.):	ASTM D1894	μ	< 0.2
Water absorption to saturation:	ASTM D570	%	< 7
Water absorption in 24h:	ASTM D570	%	< 0.6
Compr. strength at 1% deform.:	ASTM D695	N/mm ²	100
Min. service temperature:		°C	- 40
Max. service temperature:		°C	+ 105

Remark

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