

## Material Data Sheet

# UTECMID-1 Black

## General Information

UTECMID-1 is a casted polyamide, commonly known as Nylon or PA6. PA6 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:			Black
Hardness at 20°:	DIN 53505	Shore D	82
Density:	DIN 53479	g/cm <sup>3</sup>	1.13
Tensile strength:	DIN 53504	N/mm <sup>2</sup>	80
Elongation at break:	DIN 53504	%	70
Modulus of elasticity:	DIN 53457	N/mm <sup>2</sup>	3200
Coefficient of friction (dyn.):	ASTM D1894	μ	< 0.02
Water absorption saturation:	ASTM D570	%	< 9
Water absorption 50% RH:	ASTM D570	%	< 3
Min. service temperature:		°C	-40
Max. service temperature:		°C	+100

### 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.