

## Material Data Sheet

# UTECFLON-1

### General Information

UTECFLON-1 is an unfilled (virginal) PTFE (Polytetrafluorethylene) compound. PTFE is the most chemically resistant thermoplastic polymer existing and has outstanding chemical resistance to almost all chemicals and solvents. It has the lowest coefficient of friction of any solid material, is resistant to weathering and water-absorbtion and can be used over a wide range of temperature. PTFE has no memory and is subject to creep ("cold-flow") and shall not be used for dynamic applications in water. UTECFロン-1 is compliant with FDA regulations.

### Physical properties

Colour:			white
Hardness at 20°:	DIN 53505	Shore D	51 - 65
Density:	DIN 53479	g/cm <sup>3</sup>	2.14 – 2.18
Tensile strength:	DIN 53504	N/mm <sup>2</sup>	> 25 - 31
Elongation at break:	DIN 53504	%	> 300 - 400
Coefficient of friction (dyn.):	ASTM D1894	μ	0.06
Wear factor (K):	ASTM D3702	<sup>3</sup> min 10 <sup>-8</sup> /kg r	29
Compr. strength at 1% deform.:	ASTM D695	N/mm <sup>2</sup>	4 - 5
Therm. Exp. Coeff. (lin.) 25-100°:	ASTM D696	10 <sup>-5</sup> /°C	12 – 13
Min. service temperature:		°C	- 200
Max. service temperature:		°C	+ 260

### 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.

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