

## Material Data Sheet

# UTECFLON-4

### General Information

UTECFLON-4 is a PTFE (Polytetrafluorethylene) filled with 20% carbon powder and 5% graphite. The carbon fillers improve the wear resistance and compressive strength of the material and make it more resistant to extrusion while graphite provides excellent gliding properties. UTECFロン-4 has similar chemical resistance and can be used in the same temperature range like virgin PTFE. PTFE shall not be used for dynamic applications in water.

### Physical properties

Colour:			black
Hardness at 20°:	DIN 53505	Shore D	62 - 67
Density:	DIN 53479	g/cm <sup>3</sup>	2.05 – 2.11
Tensile strength:	DIN 53504	N/mm <sup>2</sup>	> 14 - 18
Elongation at break:	DIN 53504	%	> 130 - 180
Coefficient of friction (dyn.):	ASTM D1894	μ	0.09
Wear factor (K):	ASTM D3702	<sup>3</sup> min 10 <sup>-8</sup> /kg r	10 - 12
Compr. strength at 1% deform.:	ASTM D695	N/mm <sup>2</sup>	7 - 9
Therm. Exp. Coeff. (lin.) 25-100°:	ASTM D696	10 <sup>-5</sup> /°C	10 – 12
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.