

## PE-UHMW PLASTICS

### PRODUCT INFORMATION - SPECIFICATIONSHEET

#### PE 2000 - GB No. 675 + 983 + 820

**Multilene®** PE 2000 – GB is enhanced with a glass filler which gives the UHMW-PE (9,2 mio. g/mol) a higher abrasion resistance than standard material. It offers excellent impact strength for tough applications. The 983 is colored black for out door use and is UV-stabilized.

**Properties:** extremely wear resistant  
 good sliding properties  
 good chemical resistance  
 BfR approved  
 low maintenance  
 longer life time over standard UHMW PE

**Color:** green 675  
 black 983  
 dark brown 820

**Application fields:** Machine construction  
 conveyer industry  
 agriculture, farming equipment  
 waste water and filtration systems  
 paper industry (wet section of a paper machine)

### Characteristics and standard values

	METHOD	UNITS	VALUE
<b>PHYSICAL PROPERTIES</b>			
Density	ISO 1183-A	g.cm <sup>3</sup>	0,95
Abrasion (Sand-Slurry-Test)	internal method	%	65
Notched Impact Stength (Charpy)	ISO 11542-2	mJ/mm <sup>2</sup>	>120
Tensile strength	ISO 527	N/mm <sup>2</sup>	>18
Break elongation	ISO 527	%	>50
Creep properties under varying compressive stress < 10 % in 7 days	max.	N/mm <sup>2</sup>	11
Coefficient of friction	ASTM 1894	static $\mu$ dynamic $\mu$	0.14 0.09
Shore-Hardness	ISO 868	D	65
Water absorption		%	< 0.1
<b>THERMAL PROPERTIES</b>			
Melt point DSC	ISO 3146	°C	135 - 137
Permanente operation temperature, max.	-	°C	80
Coefficient of linear expansion	ISO 11359	23 - 80°C	$\approx 2.0 \times 10^{-4} / ^\circ\text{C}$

This information is, to the best of our knowledge, accurate and reliable to the date indicated. The above mentioned data have been obtained by tests we consider as reliable. We don't assure that the same results can be obtained in other laboratories, using different conditions by the preparation and evaluation of the samples.

	METHOD	UNITS	VALUE
<b>ELECTRICAL PROPERTIES</b>			
Volume resistivity	IEC 60093	$\Omega \cdot \text{cm}$	$\leq 10^{14}$
Surface resistivity	IEC 60093	$\Omega$	$\leq 10^{13}$

The above data are based on the present knowledge and are given without guarantee.  
Existing laws and conditions are to be respected by the user of our products.

**sheet and finished products**