

## Technical data sheet

### Flex 88

<b>General properties</b>				
Material designation	Flex 88			
Material colour(s)	violet blue (3015)			
Raw material	PE-UHMW   Ultra-high-molecular polyethylene			
Molecular weight (Average molar mass)	9,2 Mio.			
<b>Mechanical properties</b>		<b>Unit</b>	<b>Test method</b>	<b>Value</b>
Density		g/cm <sup>3</sup>	DIN EN ISO 1183	0,96
Tensile strength				23
Shore D hardness, 15s - Value		Skala D	DIN EN ISO 868	64 - 69
Ball indentation hardness, 30s - Value		MPa	DIN ISO 2039 Teil 1	48
Ultimate tensile strength		MPa	DIN EN ISO 527	> 40
Elongation at break		%	DIN EN ISO 527	350
Modulus of elasticity		MPa	DIN EN ISO 527	~ 650
Notched impact strength (Charpy)		kJ/m <sup>2</sup>	DIN EN ISO 179	> 80 - 105
Wear resistance		%	Sand Slurry method	~ 70
Coefficient of friction (to steel)		μ		~ 0,1
<b>Thermal properties</b>		<b>Unit</b>	<b>Test method</b>	<b>Value</b>
Dimensional stability under heat		°C	DIN 53461	47
Vicat softening temperature		°C	DIN EN ISO 306	79
Crystalline melting range		°C	DIN EN ISO 11357	130 - 135
Thermal conductivity at 23°C		W/ (K * m)	DIN 52612	~ 0,6
Specific heat at 23°C		kJ / (K * Kg)		1,8
Coefficient of linear expansion at 23°C		10 <sup>-5</sup> * (1/K)	DIN ISO 11359	10
Fire behaviour			UL 94	HB
Application temperature (min.)		°C		- 260
Application temperature (constant)		°C		+ 80
Moisture absorption		%		< 0,01
<b>Electrical properties</b>		<b>Unit</b>	<b>Test method</b>	<b>Value</b>
Specific volume resistance		Ω * cm	IEC 60093	10 <sup>12</sup>
Specific surface resistance		Ω	IEC 60093	10 <sup>12</sup>
Dielectric strength		KV/mm	IEC 60243	45
<b>Conformity with food secure regulations</b>				
FDA	-			
EU	-			

Our employees are available to answer all of your questions.

You can find additional information on our material qualities on the internet at [www.wefapress.com/en/materials](http://www.wefapress.com/en/materials).

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The materials labelled as a "Food Secure Product" (FSP) comply with the provisions of Regulations (EU) No. 10/2011 and No. 1935/2004.