



Technical data sheet

St 9000 MOS²

General properties				
Material designation	St 9000 MOS ²			
Material colour(s)	anthracite (5014)			
Raw material	PE-UHMW Ultra-high-molecular polyethylene			
Molecular weight (Average molar mass)	~ 9,2 Mio.			
Mechanical properties		Unit	Test method	Value
Density	g/cm ³	DIN 53479	0,961	
Tensile strength	N/mm ²	DIN 53455	21	
Shore D hardness, 15s - Value	Skala D	DIN 53505	68	
Ball indentation hardness, 30s - Value	N/mm ²	DIN ISO 2039 Teil 1	42	
Ultimate tensile strength	N/mm ²	DIN 53455	33	
Elongation at break	%	DIN ISO / R 527	360	
Modulus of elasticity	N/mm ²	DIN 53457	700	
Notched impact strength (Charpy)	kJ/m ²	DIN 53457	o.Br.	
Abrasion	%	Sand Slurry method	~ 70	
Coefficient of friction	μ		~ 0,08	
Thermal properties		Unit	Test method	Value
Dimensional stability under heat	°C	DIN 53461	45	
Vicat softening temperature	°C	DIN 53460	80	
Crystalline melting range	°C	DTA	135	
Thermal conductivity at 23°C	W / (K * m)		0,4	
Specific heat at 23°C	kJ / (K * Kg)		1,4	
Coefficient of linear expansion at 23°C	10 ⁻⁵ * (1/K)	DIN ISO 11359	17	
Fire behaviour		UL 94	HB	
Application temperature (min.)	°C		- 269	
Application temperature (constant)	°C		+ 80	
Moisture absorption	%		< 0,01	
Electrical properties		Unit	Test method	Value
Specific volume resistance	Ω * cm	IEC 60093	10 ¹⁵	
Surface resistance	Ω	IEC 60093	10 ¹⁴	
Dielectric strength	KV/mm	IEC 60243	90	
Conformity with food secure regulations				
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.

All stated information reflects our current knowledge. No agreement or guarantee regarding specific characteristics can be derived from the information contained in the datasheets. Each user is responsible for deciding on the suitability of a material for a specific purpose. The data supplied are subject to change.

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