

## Technical Data Sheet

# Matrox<sup>®</sup> SE black

PE-UHMW / PE 1000

### Typical characteristics

- Good wear properties
- Flame retardant
- Low coefficient of friction

### Typical industries

- Bulk Material Handling

	Test method	Unit	Guideline value
<b>General properties</b>			
Density	DIN EN ISO 1183-1	g / cm <sup>3</sup>	>0,99
Water absorption	DIN EN ISO 62	%	0,1
Flammability (Thickness 3 mm / 6 mm)	UL 94		V0
Molecular weight	-	10 <sup>6</sup> g/mol	~ 9
<b>Mechanical properties</b>			
Yield stress	DIN EN ISO 527	MPa	>20
Elongation at break	DIN EN ISO 527	%	>50
Tensile modulus of elasticity	DIN EN ISO 527	MPa	>900
Notched impact strength	DIN EN ISO 11542-2	kJ / m <sup>2</sup>	>40
Shore hardness	DIN EN ISO 868	scale D	>63
Wear resistance	Sand-slurry		130
Sand Slurry	1018 Steel=10		~ 90
<b>Thermal properties</b>			
Melting temperature	ISO 11357-3	°C	130 ... 135
Thermal conductivity	DIN 52612-1	W / (m * K)	0,41
Thermal capacity	DIN 52612	kJ / (kg * K)	1,90
Coefficient of linear thermal expansion	DIN 53752	10 <sup>-6</sup> / K	150 ... 230
Service temperature, long term	Average	°C	-200 ... 80
Service temperature, short term (max.)	Average	°C	130
Vicat softening temperature	DIN EN ISO 306, Vicat B	°C	79
<b>Electrical properties</b>			
Volume resistivity	DIN EN 62631-3-1	Ω * cm	10 <sup>9</sup>

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	Test method	Unit	Guideline value
Surface resistivity	DIN EN 62631-3-2	$\Omega$	$10^9$

The data stated above are average values ascertained by statistical tests on a regular basis. They are in accordance with DIN EN 15860. The data above are provided purely for information and shall not be regarded as binding unless expressly agreed in a contract of sale.



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