Technical Data Sheet

Polystone® M black pressed

PE-UHMW / PE 1000

Typical characteristics

- Good mechanical properties
- Low coefficient of friction
- Good wear properties
- Good impact strength

Typical industries

- 컨베이어 기술 및 자동화
- 기계 공학 산업

Sustainability

- LCA available (ISO 14040/44)

	Test method	Unit	Guideline value
General properties			
Density	DIN EN ISO 1183-1	g / cm^3	>0,93
Water absorption	DIN EN ISO 62	%	<0,01
Flammability (Thickness 3 mm / 6 mm)	UL 94		HB
Molecular weight	-	10^6 g/mol	~ 9
Mechanical properties			
Elongation at break	DIN EN ISO 527	%	>50
Tensile modulus of elasticity	DIN EN ISO 527	MPa	>650
Notched impact strength	DIN EN ISO 11542	kJ / m^2	>100
Shore hardness	DIN EN ISO 868	scale D	>63
Thermal properties			
Melting temperature	ISO 11357-3	°C	130 ... 135
Thermal conductivity	DIN 52612-1	W / (m * K)	0,40
Thermal capacity	DIN 52612	kJ / (kg * K)	1,90
Coefficient of linear thermal expansion	DIN 53752	10^{-6} / K	150 ... 230
Service temperature, long term	Average	°C	-250 … 80
Service temperature, short term (max.)	Average	°C	130
Vicat softening temperature	DIN EN ISO 306, Vicat B	°C	80
Electrical properties			
Dielectric constant	IEC 60250		2,3
Dielectric dissipation factor (10^6 Hz)	IEC 60250		0,0001

ri-inquiry@roechling.com • www.roechling.com/industrial/materials

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	Test method	Unit	Guideline value
Volume resistivity	DIN EN 62631-3-1	Ω * cm	$>10^{14}$
Surface resistivity	DIN EN 62631-3-2	Ω	$>10^{14}$
Comparative tracking index	IEC 60112		600
Dielectric strength	IEC 60243	kV / mm	>40

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.