

Technical Data Sheet



Polystone[®] M PIR blue

PE-UHMW / PE 1000

Typical characteristics

- Good wear resistance
- Good cutting resistance
- High scratch resistance
- Good impact strength

Typical industries

- Mechanical Engineering Industry

Sustainability

- Post-Industrial-Recycling material
- Recycling content 90%

	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
Mechanical properties			
Yield stress	DIN EN ISO 527	MPa	>17
Elongation at yield stress	DIN EN ISO 527	%	>18
Elongation at break	DIN EN ISO 527	%	>235
Tensile modulus of elasticity	DIN EN ISO 527	MPa	>550
Notched impact strength	DIN EN ISO 11542	kJ / m ²	>100
Shore hardness	DIN EN ISO 868	scale D	>60
Thermal properties			
Melting temperature	ISO 11357-3	°C	130 ... 135
Thermal conductivity	DIN 52612-1	W / (m * K)	0,40
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
Electrical properties			
Volume resistivity	DIN EN 62631-3-1	Ω * cm	>10 ¹⁴
Surface resistivity	DIN EN 62631-3-2	Ω	>10 ¹⁴

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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