

## Technical Data Sheet



# Polystone<sup>®</sup> M PIR natural

PE-UHMW / PE 1000

### Typical characteristics

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

### Typical industries

- Conveyor Technology & Automation
- Mechanical Engineering Industry

### Sustainability

- Post-Industrial-Recycling material

	Test method	Unit	Guideline value
<b>General properties</b>			
Density	DIN EN ISO 1183-1	g / cm <sup>3</sup>	>0,93
Water absorption	DIN EN ISO 62	%	<0,01
Flammability (Thickness 3 mm / 6 mm)	UL 94		HB
<b>Mechanical properties</b>			
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 <sup>2</sup>	>100
Shore hardness	DIN EN ISO 868	scale D	>60
<b>Thermal properties</b>			
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 <sup>-6</sup> / K	150 ... 230
Service temperature, long term	Average	°C	-250 ... 80
Service temperature, short term (max.)	Average	°C	130
<b>Electrical properties</b>			
Volume resistivity	DIN EN 62631-3-1	Ω * cm	>10 <sup>14</sup>
Surface resistivity	DIN EN 62631-3-2	Ω	>10 <sup>14</sup>

