

Polystone® M black

Product characteristics

- High abrasion and wear resistance
- Low coefficient of friction
- High impact strength

Typical field of application

- Bottling and food industry
- Mechanical engineering
- Bearing and packing industry

	Test method	Unit	Value
General properties			
Density	DIN EN ISO 1183-1	g/cm ³	0,94
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	N/mm ²	21
Elongation at break	DIN EN ISO 527	%	>200
Tensile modulus of elasticity	DIN EN ISO 527	MPa	700
Impact strength	DIN EN ISO 527	%	no break
Shore hardness	DIN EN ISO 868	scale D	63
Wear resistance	Sand-slurry		80
Thermal properties			
Melting temperature	ISO 11357-3	°C	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 ⁻¹	150-230
Service temperature, long term	Average	°C	-250 ... 80
Service temperature, short term (max.)	Average	°C	130
Heat deflection 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
Volume resistivity	IEC 60093	Ω *cm	>10 ¹⁴
Surface resistivity	IEC 60093	Ω	>10 ¹⁴
Comparative tracking index	IEC 60112		600
Dielectric strength	IEC 60243	kV/mm	45

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.