

Polystone® G black B 100

Product characteristics

- High welding and processing properties
- High chemical resistance
- Suitable for contact with drinking water

Typical field of application

- Chemical engineering and tank building
- Drinking and waste water technology
- Bottling and food industry

	Test method	Unit	Value
General properties			
Density	DIN EN ISO 1183-1	g/cm ³	0,96
Water absorption	DIN EN ISO 62	%	<0,01
Melt Flow Rate (MFR 190/5)	DIN EN ISO 1183-1	g/10 min	0,22
Moulding Compound	DIN EN ISO 1872-1		PE-EACH-50T003
MRS classification	ISO TR 9080		PE100
Non-toxicity			+
Approval			DIBt
Flammability (Thickness 3 mm / 6 mm)	UL 94		HB
Mechanical properties			
Yield stress	DIN EN ISO 527	MPa	24
Elongation at yield stress	DIN EN ISO 527	%	10
Elongation at break	DIN EN ISO 527	%	>50
Tensile modulus of elasticity	DIN EN ISO 527	MPa	1000
Notched impact strength (charpy)	DIN EN ISO 179	kJ/m ²	>16
Shore hardness	DIN EN ISO 868	scale D	63
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	-50 ...80
Service temperature, short term (max.)	Average	°C	100
Heat deflection temperature	DIN EN ISO 306, Vicat B	°C	67
Electrical properties			
Dielectric constant	IEC 60250		2,5
Dielectric dissipation factor (10 ⁶ Hz)	IEC 60250		0,0004
Volume resistivity	IEC 60093	Ω *cm	>10 ¹⁴
Surface resistivity	IEC 60093	Ω	>10 ¹⁴
Arc resistance	IEC 60093	degree	L4 (*)
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.

(*) literature value