

### Technical Data Sheet



# Polystone® G B 100 BIO (mb) black

PE-HD (PE 100)

#### Typical characteristics

- Chemical resistant
- Suitable for contact with drinking water

#### Typical industries

- Chemical Processing Industry
- Chemical storage tanks
- Drinking & Waste Water Technology

#### Sustainability

- Mass-balanced
- Bio-based raw materials reduce the use of fossil raw materials

	Test method	Unit	Guideline value
<b>General properties</b>			
Density	DIN EN ISO 1183-1	g / cm <sup>3</sup>	>0,96
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	>23
Elongation at break	DIN EN ISO 527	%	>50
Tensile modulus of elasticity	DIN EN ISO 527	MPa	>1100
Notched impact strength	DIN EN ISO 179	kJ / m <sup>2</sup>	>16
Shore hardness	DIN EN ISO 868	scale D	63
<b>Thermal properties</b>			
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 <sup>-6</sup> / K	150 ... 230
Service temperature, long term	Average	°C	-50 ... 80
Service temperature, short term (max.)	Average	°C	100
Vicat softening temperature	DIN EN ISO 306, Vicat B	°C	67
<b>Electrical properties</b>			
Dielectric constant	IEC 60250		2,5
Dielectric dissipation factor (10 <sup>6</sup> Hz)	IEC 60250		0,0004
Volume resistivity	DIN EN 62631-3-1	Ω * cm	>10 <sup>14</sup>



	Test method	Unit	Guideline value
Surface resistivity	DIN EN 62631-3-2	$\Omega$	$>10^{14}$
Comparative tracking index	IEC 60112		600
Dielectric strength	IEC 60243	kV / mm	45

