

Technical Data Sheet

Polystone® G black HD

Product characteristics

- Very good welding and processing properties
- Good chemical resistance
- Low weight

Product applications

- Chemical engineering and tank building
- Corrosion protection

	Test method	Unit	Guideline Value
General properties			
Density	DIN EN ISO 1183-1	g / cm ³	0,96
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	25
Elongation at yield stress	DIN EN ISO 527	%	9,5
Elongation at break	DIN EN ISO 527	%	>50
Tensile modulus of elasticity	DIN EN ISO 527	MPa	1200
Impact strength	DIN EN ISO 179	kJ / m ²	without break / ohne Bruch
Notched impact strength	DIN EN ISO 179	kJ / m ²	16
Shore hardness	DIN EN ISO 868	scale D	65
Ball indentation hardness	DIN EN ISO 2039-1	MPa	43
Thermal properties			
Melting temperature	ISO 11357-3	°C	135
Thermal conductivity	DIN 52612-1	W / (m * K)	0,38
Thermal capacity	DIN 52612	kJ / (kg * K)	1,90
Coefficient of linear thermal expansion	DIN 53752	10 ⁻⁶ / 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
Mean coefficient of linear thermal expansion	ISO 11359-2	K ⁻¹	1,8 x 10 ⁻⁴
Electrical properties			
Dielectric constant	IEC 60250		2,5
Dielectric dissipation factor (10 ⁶ Hz)	IEC 60250		0,0004
Volume resistivity	DIN EN 62631-3-1	Ω * cm	>10 ¹⁴
Surface resistivity	DIN EN 62631-3-2	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.