Technical Data Sheet

Polystone® G HD natural extruded

PE-HD / PE 300

Typical characteristics

- Good weldability
- Easy processing
- Chemical resistant
- Good mechanical properties

Typical industries

- Chemical Processing Industry
- Mechanical Engineering Industry
- Vacuum Forming
- Drinking & Waste Water Technology
- Chemical storage tanks
- Aquafarming

	Test method	Unit	Guideline value
General properties			
Density	DIN EN ISO 1183-1	g / cm^3	>0,95
Water absorption	DIN EN ISO 62	%	<0,01
Flammability (Thickness 3 mm / 6 mm)	UL 94		HB
Flammability (Thickness 3 - 10 mm)	DIN 4102		B2
Mechanical properties			
Yield stress	DIN EN ISO 527	MPa	>22
Elongation at break	DIN EN ISO 527	%	>50
Tensile modulus of elasticity	DIN EN ISO 527	MPa	>1000
Notched impact strength	DIN EN ISO 179	kJ / m^2	>10
Shore hardness	DIN EN ISO 868	scale D	>60
Thermal properties			
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^{-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

ri-inquiry@roechling.com • www.roechling.com/industrial/materials

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INTEGRATED MANAGEMENT SYSTEM

	Test method	Unit	Guideline value
Electrical properties			
Dielectric constant	IEC 60250		2,4
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	>40

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.