Technical Data Sheet

Polystone® E natural

Product characteristics

- High impact strength
- Good processing properties
- High flexibility

Product applications

- Orthopaedic technology
- Vacuum forming industry

	Test method	Unit	Value
General properties			
Density	DIN EN ISO 1183-1	g / cm^3	0,92
Water absorption	DIN EN ISO 62	%	<0,1
Flammability (Thickness 3 mm / 6 mm)	UL 94		HB
Mechanical properties			
Yield stress	DIN EN ISO 527	MPa	11
Elongation at break	DIN EN ISO 527	%	>50
Tensile modulus of elasticity	DIN EN ISO 527	MPa	200
Notched impact strength	DIN EN ISO 179	kJ / m^2	85
Shore hardness	DIN EN ISO 868	scale D	45
Thermal properties			
Crystalline grain melting range	ISO 11357-3	°C	110
Thermal conductivity	DIN 52612-1	W / (m * K)	0,35
Thermal capacity	DIN 52612	kJ / (kg * K)	2,10
Coefficient of linear thermal expansion	DIN 53752	10^{-6} / K	150 - 230
Service temperature, long term	Average	°C	-50 … 60
Service temperature, short term (max.)	Average	°C	90
Vicat softening temperature	DIN EN ISO 306, Vicat B	°C	96
Electrical properties			
Dielectric constant	IEC 60250		2,4
Dielectric dissipation factor (10^6 Hz)	IEC 60250		0,0006
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.

Röchling Engineering Plastics SE & Co. KG
Röchlingstr. 1 • D-49733 Haren/Germany • Tel. +49 5934 701-0 • Fax +49 5934 701-299 • info@roechling-plastics.com • www.roechling.com
Date: 23/09/2016 Version: 1.0.0