Technical Data Sheet

Polystone® D BIO (mb) natural

PE-HD / PE 500

Typical characteristics

- Good mechanical properties
- Physiologically safe
- Good wear resistance
- Good cutting resistance
- High scratch resistance

Typical industries

- Construction de machines et d'installations
- Industrie agroalimentaire
- Sport et loisirs
- La transformation des viandes, des poissons, des volailles
- Produits de boulangerie et de confiserie

Sustainability

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

	Test method	Unit	Guideline value
General properties			
Densité	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
Mechanical properties			
Yield stress	DIN EN ISO 527	MPa	>27
Elongation at break	DIN EN ISO 527	%	>50
Tensile modulus of elasticity	DIN EN ISO 527	MPa	>1200
Shore hardness	DIN EN ISO 868	scale D	65
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	-100 ... 80
Service temperature, short term (max.)	Average	°C	80
Vicat softening temperature	DIN EN ISO 306, Vicat B	°C	79
Electrical properties			
Dielectric constant	IEC 60250		2,3

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Print: 15/06/2026 • Release: 20/09/2023 • Version: 1.0
PIM-ID: 718493 • PIM-Code: 95-8-17.11.143.9.23-5.5.3.5.5-5.9-5
Company-IDs: 20000-1

	Test method	Unit	Guideline value
Dielectric dissipation factor (10^6 Hz)	IEC 60250		0,0002
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.