Technical Data Sheet

Polystone® D nuclear natural

PE-HD / PE 500

Typical characteristics

- Shielding against neutron radiation
- Good mechanical properties

Typical industries

- Nuclear Industry

	Test method	Unit	Guideline value
General properties			
Hydrogen content	Elemental analysis	% by weight	13,6
Boron content	Elemental analysis	% by weight	>1
Specific Gravity	DIN EN ISO 1183-1	g / cm^3	0,97
Mechanical properties			
Elongation at yield stress	DIN EN ISO 527	%	9
Elongation at break	DIN EN ISO 527	%	400
Shore hardness	DIN EN ISO 868	scale D	66
Thermal properties			
Thermal conductivity	DIN 52612-1	W / (m * K)	0,40
Coefficient of linear thermal expansion	DIN 53752	10^{-6} / K	1 ... 1,5
Service temperature, short term (max.)	Average	°C	-100 ... 100
Crystalline grain melting range	DSC	°C	135
Service Temperature		°C	-100 ... 80
Electrical properties			
Volume resistivity	DIN EN 62631-3-1	Ω * cm	$>10^{12}$
Surface resistivity	DIN EN 62631-3-2	Ω	$>10^{11}$
Comparative tracking index	IEC 60112	CTI	600

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.

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Print: 15/12/2025 • Release: 05/05/2025 • Version: 3.0
PIM-Version: 990 • PIM-ID: 718603 • PIM-Code: 990-18-11.17-6-5
Company-IDs: 20000-1