

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

