

TECHNICAL DATA: POLYETHYLENE

DISTRIBUTION BOX POLYETHYLENE TECHNICAL DATA

General properties

Density	0.96	g/cm ³	DIN EN ISO 1183-1
Flammability	HB/HB	3 mm / 6 mm	UL 94
Absorption of moisture	<0.01	%	DIN EN ISO 62

Mechanical properties

Yield stress/ tensile strength	22	MPa	DIN EN ISO 527
Tensile elongation	>50	%	DIN EN ISO 527
Tensile modulus of elasticity	800	MPa	DIN EN ISO 527
Notched impact strength (Charpy)	10	kJ/m ²	DIN EN ISO 179
Shore hardness	63	Skala D	DIN EN ISO 868

Thermal properties

Melting temperature	162 – 165	°C	ISO 11357-3
Thermal conductivity	0.20	W / (m · K)	DIN 52612-1
Specific thermal capacity	1.70	kJ / (kg · K)	DIN 52612
Coefficient of linear thermal expansion	120 – 190	10-6 K-1	DIN 53752
Service temperature, long term (min.)	-30	°C	Benchmarks
Service temperature, long term (max.)	100	°C	Benchmarks
Service temperature, short term	150	°C	Benchmarks
Heat deflection temperature	85	°C	DIN EN ISO 306 (Vicat B)

Electrical properties

Dielectric constant	2.50		DIN IEC 60250
Dielectric dissipation factor	1.9*10 ⁻⁴		DIN IEC 60250
Specific volume resistivity	>10 ¹⁴	Ω · cm	DIN IEC 60093
Surface resistivity	>10 ¹³	Ω	DIN VDE 0303-3
Comparative tracking index (test solution A)	600		DIN EN 60112
Dielectric strength	45	kV/mm	DIN EN 60243