

Technical Data Sheet



Ortho-PE 1000

Polyethylen

General properties	Test method	Unit	Guideline value
Density	DIN EN ISO 1183	g / cm ³	0,930
Mechanical properties			
Yield stress	DIN EN ISO 527	MPa	19
Dielectric strength	DIN IEC 60243-1	kV/mm	44
Elongation with tensile stress	DIN EN ISO 527	%	11
E-Modulus	DIN EN ISO 527	MPa	700
Ball indentation hardness	DIN EN ISO 2039-1	MPa	30
Water absorption	DIN EN ISO 62	%	<0,01
Impact strength	DIN EN ISO 179	kJ/m ²	without break
Molecular weight			5.000.000
Shore hardness	DIN EN ISO 868	scale D	60
Thermal properties			
Processing temperature (oven temperature)		° C	190 - 215 *
Heating time min/mm panel thickness (dwell time in the oven)			3 - 4 *
Note	* The actual parameters vary depending on the type and condition of the oven and the panel thickness, so the values given are for guidance only. The exact parameters must be determined by the user		
Mean thermal expansion coefficient coefficient of linear expansion	DIN EN ISO 11359-2	K ⁻¹	1,8 * 10 ⁻⁴
Vicat B	DIN EN ISO 306, Vicat B	°C	82
Temperature application range		°C	- 260 bis + 80
Electrical properties			
Surface resistance	DIN EN 61340	Ω	≥10 ¹³

The data are guide values for the respective material and may vary depending on the processing method and test specimen production. As a rule, these are average values from measurements on extruded sheets with a thickness of 4 mm. In the case of sheets produced exclusively by pressing, the measurements are generally taken on sheets 20 mm thick. Deviations are possible if sheets in these thicknesses are not available. For laminated boards, the technical characteristics refer to the unlaminated base boards. The data cannot simply be transferred to other product types (e.g. pipes, solid rods) of the same material or the further processed products. The suitability of materials for a specific application must be checked by the processor or user. The technical characteristic values are merely a planning aid. In particular, they do not represent guaranteed properties.