Technical Data Sheet

PE 1000 Clean AST

Polyethylen

General properties	Test method	Unit	Guideline value
Density	DIN EN ISO 1183	g / cm³	0,95
Medium molecular weight		10^6g/mol	~ 5
Water absorption		%	≤ 0,01
Fire behaviour ≥ 1 mm	DIN 4102		B2
Fire behaviour 3.2 mm	UL 94	---	HB
Mechanical properties			
Yield stress	DIN EN ISO 527	MPa	≥ 17
Elongation with tensile stress	DIN EN ISO 527	%	≤ 20
E-Modulus	DIN EN ISO 527	MPa	≥ 650
Ball indentation hardness	DIN EN ISO 2039-1	MPa	30 … 38
Elongation at break	DIN EN ISO 527	%	≥ 300
Notched impact strength	DIN EN ISO 179	kJ / m²	without breakage
Charpy notched impact strength	DIN EN ISO 11542-2		~ 130
Shore hardness	DIN EN ISO 868	D63	D60 … D65
Dynamic coefficient of friction			~ 0,2
Wear and tear	Sand Slurry		~ 100
Thermal properties			
Thermal conductivity (23 °C)	DIN 52612	W / (m * K)	0,4
Vicat softening temperature (50 N)	DIN EN ISO 306	°C	80
Coefficient of linear thermal expansion (between 23 °C - 80 °C)	DIN 53 752	10^{-4} K^{-1}	1,5 … 2
Continuous operating temperature		°C	- 200 … 80
Melting temperature	ISO 3146	°C	130 … 140
Electrical properties			
Contact resistance	IEC 60093	Ω * cm	≤ 10^9
Surface resistance	IEC 60093	Ω	≤ 10^9

This product information is based on current knowledge and experience. The technical guide values refer to a 40 mm thick pressed board and may vary depending on the thickness due to the process. Due to the wide range of possible influences when processing and using our products, they do not exempt the user from carrying out their own tests and trials. A legally binding assurance of certain properties cannot be derived from this information. Industrial property rights must be observed where applicable. We will be happy to provide you with detailed technical advice.

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