

PE 100 pipes

Technical data for PE100 pipe material				
	Property	Standard	Unit	PE100 black
	Specific density at 23°C	ISO 1183	g/cm ³	0,95
	Melt flow index	ISO 1133	g/10min	0,30
	MFR 190/5			<0,10
	MFR 190/2,16			
	MFR 230/5 MFI range	ISO1872/1873		T003
Mechanical Properties	Tensile stress at yield	ISO 527	MPa	25
	Elongation at yield	ISO 527	%	9
	Elongation at break	ISO 527	%	>600
	Impact strength unnotched at +23°C	ISO 179	kJ/m ²	no break no break
	Impact strength unnotched at -30°C			
	Impact strength notched at +23°C	ISO 179	kJ/m ²	16
	Impact strength notched at 0°C			
	Impact strength notched at -30°C			
	Ball indentation hardness acc. Rockwell	ISO 2039-1	MPa	46
	Flexural strength (3,5% flexural stress)	ISO 178	MPa	24
	Modulus of elasticity	ISO 527	MPa	1100
	Resistance to internal pressure [20°C, 12.4MPa, 100h]	ISO 4427		No failure or defect
	Resistance to internal pressure [80°C, 5.5MPa, 165h]	ISO 4427		No failure or defect
Resistance to internal pressure [80°C, 5.0Pa, 1000h]	ISO 4427		No failure or defect	
Thermal stability OIT 200°C	EN 728	Min.	> 20min	
Thermal Properties	Vicat-Softening point VST/B/50	ISO 306	°C	77
	Heat deflection temperature HDT/B	ISO 75	°C	75
	Linear coefficient of thermal expansion	DIN 53752	K ⁻¹ x 10 ⁻⁴	1,8
	Thermal conductivity at 20 °C	DIN 52612	W/(mxK)	0,4
	Flammability	UL94 DIN 4102	--	94-HB B2
Electrical Properties	Specific volume resistance	VDE 0303	OHM cm	>10 ¹⁶
	Specific surface resistance	VDE 0303	OHM	>10 ¹³
	relative dielectric constant at 1 MHz	DIN 53483	--	2,3
	Dielectric strength	VDE 0303	kV/mm	70
	Physiologically non-toxic	EEC 90/128	--	Yes
	FDA	--	--	Yes
	UV stabilized	--	--	carbon black
	Colour	--	--	black