

PAR Group Ltd

Polyethylene PE1000 Rod - Natural & Black

Technical Data Sheet



General Properties		Test Method	Colour: Natural Value	Colour: Black Value	Unit
Density	DIN EN ISO 1183-1	0,93	>0,93		g/cm ³
Water Absorption	DIN EN ISO 62	<0,01	<0,01		%
Flammability (Thickness 3mm/6mm)	UL 94	HB	HB		
Molecular Weight	-	-	~9		10 ⁶ g/mol
Mechanical Properties		Test Method	Value	Value	Unit
Yield Stress	DIN EN ISO 527	20	-		MPa
Elongation at Break	DIN EN ISO 527	>200	>50		%
Tensile Modulus of Elasticity	DIN EN ISO 527	680	>650		MPa
Notched Impact Strength	DIN EN ISO 179	No Break	>100		kJ/m ²
Shore Hardness	DIN EN ISO 868	63	>63		Scale D
Wear Resistance	Sand-Slurry	80	-		
Thermal Properties		Test Method	Value	Value	Unit
Melting Temperature	ISO 11357-3	135	130 ... 135		°C
Thermal Conductivity	DIN 52612-1	0,40	0,40		W / (m * K)
Thermal Capacity	DIN 52612	1,90	1,90		kJ / (kg * K)
Coefficient of Linear Thermal Expansion	DIN 53752	150 - 230	150 ... 230		10 ⁻⁶ / K
Service Temperature, Long Term	Average	-250 ... 80	-250 ... 80		°C
Service Temperature, Short Term (max.)	Average	130	130		°C
Vicat Softening Temperature	DIN EN ISO 306, Vicat B	80	80		°C
Electrical Properties		Test Method	Value	Value	Unit
Dielectric Constant	IEC 60250	2,3	2,3		
Dielectric Dissipation Factor (10 ⁶ Hz)	IEC 60250	0,0001	0,0001		
Volume Resistivity	DIN EN 62631-3-1	>10 ¹⁴	>10 ¹⁴		Ω * cm
Surface Resistivity	DIN EN 62631-3-2	>10 ¹⁴	>10 ¹⁴		Ω
Comparative Tracking Index	IEC 60112	600	600		
Dielectric Strength	IEC 60243	45	>40		kV / mm

The data stated above are average values ascertained by statistical tests on a regular basis. They are in accordance with DIN EN 15860.

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