



RG1000 Black/Green

PE-55

(Ultra High Molecular Weight Polyethylene
With Recycled Material)

Colour: Black/Green

Density: 0.940g/cm³

Material Data Sheet

Mechanical Properties	Value	Unit	DIN/EN/ISO
Tensile strength at yield	22	MPa	527
Tensile strength at break	31	MPa	31
Elongation at yield	11	%	527
Elongation at break	>600	%	527
Modulus of elasticity	900	MPa	527
Flexural strength	30	MPa	178
Impact strength	No break	kJ/m ²	179
Ball indentation hardness	40	MPa	2039
Shore hardness D	65	-	868

Thermal Properties	Value	Unit	DIN/EN/ISO
Vicat softening temperature	74	°C	306
Heat deflection temperature	70	°C	75
Service temperature (max)	80	°C	-
Service temperature (min)	-80	°C	-
Coefficient of expansion	1.55	K ⁻¹ x 10 ⁻⁴	53752
Coefficient of thermal conductivity	0.43	W/(K*m)	52612

Electrical Properties	Value	Unit	DIN/IEC/VDE
Surface resistivity	>10 ¹⁶	-	0303
Volume resistivity	>10 ¹⁵	X cm	0303
Dielectric strength	17	kV/mm	0303
Tracking resistance	KB>600	-	53480

Other Properties	Value	Unit	DIN/EN/ISO/IEC
Water absorption	<0.1	%	53495
Coefficient of friction	0.25	-	53375
Specific gravity	0.93	g/cm ³	1183
Flammability (UL94)	HB	-	-

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The following information corresponds with our current knowledge and indicates our products and possible applications. We cannot give a legally binding guarantee of certain properties or the suitability for a specific application. Existing commercial patents must be observed. A definitive quality guarantee is given in our general conditions of sales. Unless otherwise stated, these values represent averages taken from injection moulding samples. We reserve the right of technical alterations.