FEATURES

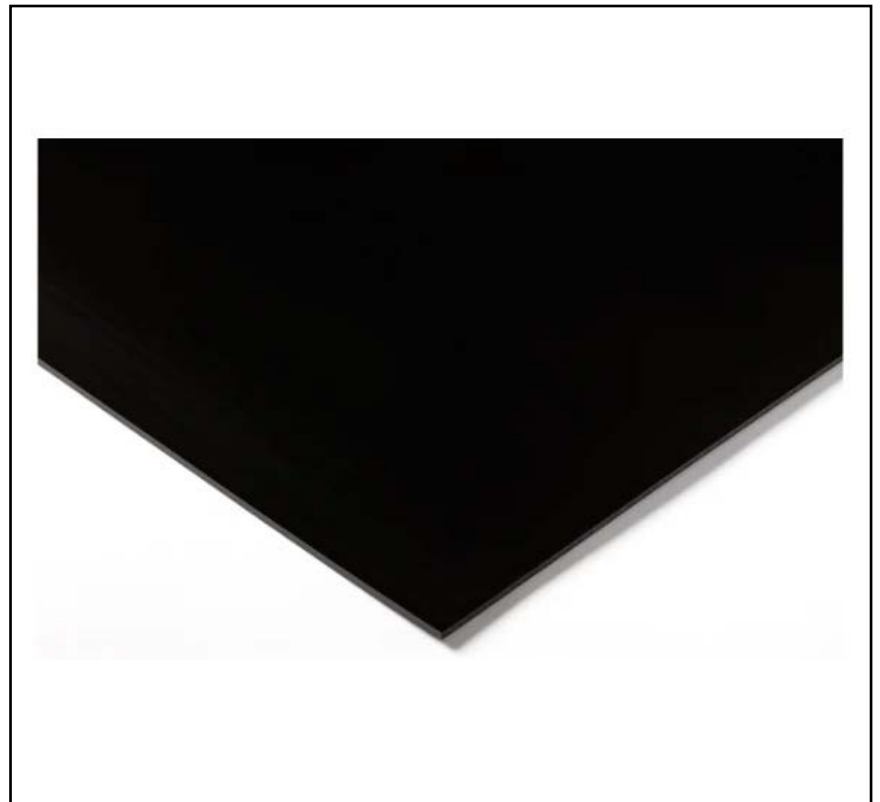- **Maximum operating temperature of +90 °C**

- **Flammability rating of UL 94 HB**

- **Resistant to dilute acids, cleaning agents and numerous solvents**

- **Very good electrical insulation properties**

Black Plastic Sheet, 1000mm x 500mm x 4mm

RS Stock No.: 408-3829

RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

From the trusted brand RS PRO, comes a range of black polyethylene sheets. Manufactured to industry standards and featuring 50 Ball Indentation hardness, these sheets are of high quality and are great value

General Specifications

Form	Solid
Colour	Black
Material	HDPE
Laminated	Yes
Laminated Material	Acrylic; Epoxy Resin; Fine Weave Cotton; Glass Fibre
Flammability Rating	UL 94 HB
Polymer Type	Copolymer
Finish	Clear
Adhesive Backing	Yes
Applications	Polyethelene has an array of application use such as; Chemical apparatus, Plugs, Seals, Food processing, Insulators, and low load rollers

Electrical Specifications

Specific Surface Resistance	10^{14} Ω
Specific Volume Resistance	10^{14} Ω.cm
Dielectric Constant	2.9
Dielectric Loss Factor	0.0017tg
Breakdown Voltage	38kV/mm

Solid Plastic Sheets

Mechanical Specifications

Length	1000mm
Width	500mm
Thickness	4mm
Density	0.95 to 0.96g/cm^3
Tensile Strength	25MPa
Hardness	50 Ball Indentation
Water absorption	0.02%
Thermal Conductivity	0.17W/m.K
Elongation	50%
Impact Strength	12kJM^{-2}
Modulus Of Elasticity	2800MPa
Flexural Strength	175MPa
Compression Strength	23MPa
Compression Modulus	3400MPa
Ball Indentation Hardness	253MPa
Thermal Expansion	5x10^{-5}k^{-1}
Specific Heat	1.1J/(g.K)
Specific Gravity	1.38
Flexural Modulus	2600MPa
Friction Coefficient	0.54
Poisson Ratio	0.38kJM^{-2}

Operation Environment Specifications

Maximum Operating Temperature	90°C
Melting Point	255°C
Glass Transition Temperature	150°C
Vicat Softening Point	65°C

Approvals

Compliance/Certifications	CE / UR / cUR
Standards Met	DIN 50014