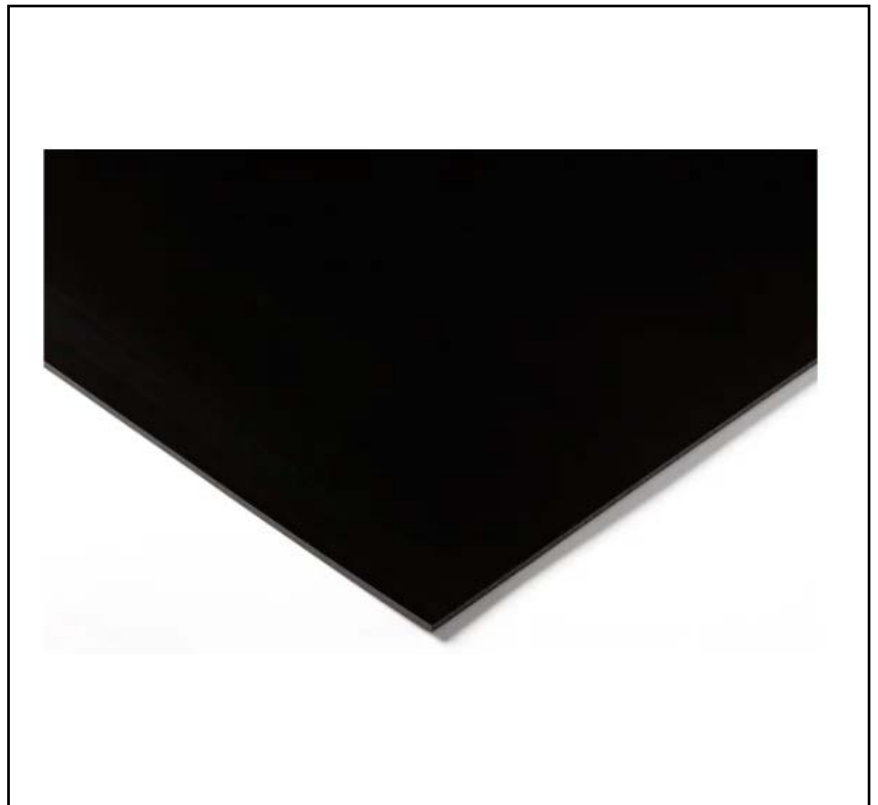


## FEATURES

- 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 15mm

RS Stock No.: 408-3857



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

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

### Electrical Specifications

<b>Specific Surface Resistance</b>	$10^{14} \Omega$
<b>Specific Volume Resistance</b>	$10^{14} \Omega \cdot \text{cm}$
<b>Dielectric Constant</b>	2.9
<b>Dielectric Loss Factor</b>	0.0017tg
<b>Breakdown Voltage</b>	38kV/mm

### Mechanical Specifications

Length	1000mm
Width	500mm
Thickness	15mm
Density	0.95 to 0.96g/cm <sup>3</sup>
Tensile Strength	25MPa
Hardness	50 Ball Indentation
Water absorption	0.02%
Thermal Conductivity	0.17W/m.K
Elongation	50%
Impact Strength	12kJM <sup>-2</sup>
Modulus Of Elasticity	2800MPa
Flexural Strength	175MPa
Compression Strength	23MPa
Compression Modulus	3400MPa
Ball Indentation Hardness	253MPa
Thermal Expansion	5x10 <sup>-5</sup> k <sup>-1</sup>
Specific Heat	1.1J/(g.K)
Specific Gravity	1.38
Flexural Modulus	2600MPa
Friction Coefficient	0.54
Poisson Ratio	0.38kJM <sup>-2</sup>

### 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