## FEATURES

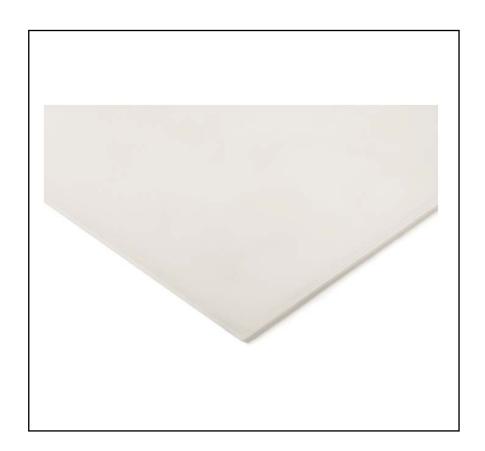- **Maximum operating temperature of +90 °C and +100 °C offered in this range**

- **Flammability rating of UL 94 HB**

- **Excellent resistance to cold and stress cracking, shock, abrasion and chemical**

- **Very good electrical insulation properties**

# White Plastic Sheet, 1000mm x 500mm x 10mm

## RS Stock No.: 680-599

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.

# Solid Plastic Sheets

## Product Description

From the trusted brand RS PRO, comes a range of white polyethylene sheets. Manufactured to industry standards, these sheets are of high quality and are great value

## General Specifications

| | |
|---|---|
| **Form** | Solid |
| **Colour** | White |
| **Material** | PE-UHMW |
| **Laminated** | Yes |
| **Laminated Material** | Acrylic; Epoxy Resin; Fine Weave Cotton; Glass Fibre |
| **Flammability Rating** | UL 94 HB |
| **Polymer Type** | Copolymer |
| **Finish** | Mirror |
| **Adhesive Backing** | Yes |
| **Applications** | Polyethylene 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** | $10^{13}$ Ω.cm |
| **Dielectric Constant** | 2.9 |
| **Dielectric Loss Factor** | 0.0017tg |
| **Breakdown Voltage** | 17kV/mm |
| **Dielectric Strength 23°C, 50% r.h.** | 49kV/mm |

## Mechanical Specifications

| | |
|---|---|
| **Length** | 1000mm |
| **Width** | 500mm |
| **Thickness** | 10mm |
| **Density** | 0.95 to 0.96g/cm$^3$ |
| **Tensile Strength** | 25MPa |
| **Hardness** | 50Ball Indentation |
| **Water absorption** | 0.02% |
| **Thermal Conductivity** | 0.17W/m.K |
| **Elongation** | 350% |
| **Impact Strength** | 12kJM$^{-2}$ |
| **Modulus Of Elasticity** | 2800MPa |
| **Flexural Strength** | 91MPa |
| **Compression Strength** | 20MPa |
| **Compression Modulus** | 2300MPa |
| **Ball Indentation Hardness** | 165MPa |
| **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** | -60°C |
| **Vicat Softening Point** | 65°C |

## Approvals

| | |
|---|---|
| **Compliance/Certifications** | CE / UR / cUR |