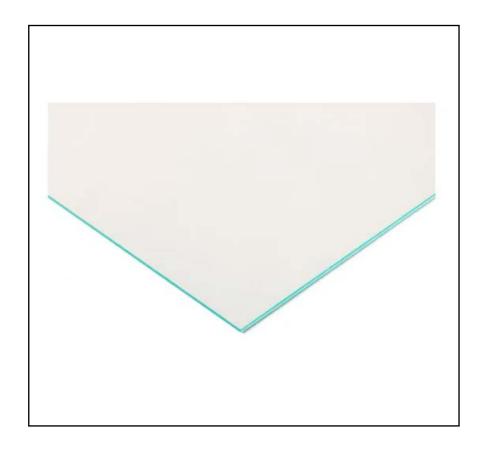## FEATURES

- **Maximum operating temperature of +70 °C**

- **High impact and weather resistance**

- **Machinable and easy to weld**

- **Available in a variety of different sizes**

# Clear Plastic Sheet, 500mm x 400mm x 2mm

**RS Stock No.: 824-496**



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 RS PRO, comes a range of high-quality extruded acrylic sheets, Manufactured to industry standards, these sheets are of great value

## General Specifications

| | |
|---|---|
| **Form** | Solid |
| **Colour** | Clear |
| **Material** | Extruded Acrylic |
| **Laminated** | Yes |
| **Laminated Material** | Acrylic; Epoxy Resin; Fine Weave Cotton; Glass Fibre |
| **Flammability Rating** | UL 94 V-0 |
| **Polymer Type** | Copolymer |
| **Finish** | Clear |
| **Adhesive Backing** | Yes |
| **Applications** | Applications include the following;<br>POS signs and displays, Advertising displays, Brochure holders, Display cases, Lighting and light boxes, Office screens and dividers, Glazing |

## 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** | 500mm |
| **Width** | 400mm |
| **Thickness** | 2mm |
| **Density** | 1.41g/cm$^3$ |
| **Tensile Strength** | 65Mpa |
| **Hardness** | M90 Rockwell |
| **Water absorption** | 0.005% |
| **Thermal Conductivity** | 0.17W/m.K |
| **Elongation** | 50% |
| **Impact Strength** | 12kJM$^{-2}$ |
| **Modulus Of Elasticity** | 2500Mpa |
| **Flexural Strength** | 91Mpa |
| **Compression Strength** | 20Mpa |
| **Compression Modulus** | 2300Mpa |
| **Ball Indentation Hardness** | 165Mpa |
| **Thermal Expansion** | 8x10$^{-5}$k$^{-1}$ |
| **Specific Heat** | 1.1J/(g.K) |
| **Specific Gravity** | 1.38 |
| **Flexural Modulus** | 2600Mpa |
| **Friction Coefficient** | 0.54 |
| **Poisson Ratio** | 0.38kJM$^{-2}$ |
| **Elongation at Break** | 1.41 |

## Operation Environment Specifications

| | |
|---|---|
| **Maximum Operating Temperature** | 70°C |
| **Melting Point** | 255°C |
| **Glass Transition Temperature** | -60°C |
| **Vicat Softening Point** | 65°C |

## Approvals

| | |
|---|---|
| **Compliance/Certifications** | CE / UR / cUR |
| **Standards Met** | DIN 50014 |