RS PRO

FEATURES

- **Maximum operating temperatures of +170 °C and +180 °C**

- **Flammability rating of UL 94 HB**

- **High tensile and impact strength**

- **High abrasion, chemical, acid and alkali resistance**

Natural Plastic Sheet, 500mm x 500mm x 20mm

RS Stock No.: 184-7204

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 cast nylon sheets. Manufactured to industry standards and featuring 170 ball indentation hardness, these sheets are of high quality and are great value

General Specifications

Form	Solid
Colour	Natural
Material	Nylon
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	Nylon has an array of application use such as; Industrial, Automotive, Electronics

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	500mm
Thickness	20mm
Density	1.15g/cm^3
Tensile Strength	60 (Wet) MPa, 85 (Dry) MPa
Hardness	170 Ball Indentation
Water absorption	6 to 7%
Thermal Conductivity	0.38W/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	170°C
Melting Point	215°C
Glass Transition Temperature	-60°C
Vicat Softening Point	65°C

Approvals

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