

FEATURES

- Resistance to harsh chemicals including wide range of acids and base
- High performance in hydrocarbons (natural gas and fuels) and organic solvents
- Resistance to hydrolysis (chemical breakdown in water) with a low water absorption and permeability
- High creep resistance (creep is the tendency of a solid material to move slowly or deform permanently under the influence of mechanical stresses)
- Resistant to stream, water and sea water
- High mechanical and tensile strength
- High stress cracking resistance
- Excellent slide and wear properties
- Good electrical insulation properties

Beige Plastic Sheet, 500mm x 50mm x 12mm

RS Stock No.: 129-836



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 RS Pro a range of high-quality PEEK polymer solid plastic sheets available in a range of sizes and thicknesses

General Specifications

Form	Solid
Colour	Beige
Material	PEEK
Laminated	Yes
Laminated Material	Acrylic; Epoxy Resin; Fine Weave Cotton; Glass Fibre
Flammability Rating	UL 94 V-0
Polymer Type	Copolymer; Homopolymer
Finish	Mirror
Adhesive Backing	Yes
Applications	Components that can be manufactured from this plastic include the following: Friction bearings, Piston Parts, Pump housings and metering pumps, Bushes, Compressor plate valves, Cable Insulation, Light mountings, Ball valve seals, Wafer supports, Plug parts

Electrical Specifications

Specific Surface Resistance	$10^{14} \Omega$
Specific Volume Resistance	$10^{14} \Omega \cdot \text{cm}$
Dielectric Constant	2.9
Dielectric Loss Factor	0.0017tg
Breakdown Voltage	17kV/mm

Mechanical Specifications

Length	500mm
Width	50mm
Thickness	12mm
Density	1.32g/cm ³
Tensile Strength	95MPa
Hardness	M 99 Rockwell
Water absorption	0.5%
Thermal Conductivity	0.17W/m.K
Elongation	25%
Impact Strength	12kJM ⁻²
Modulus Of Elasticity	4200MPa
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	300°C
Melting Point	255°C
Glass Transition Temperature	150°C
Vicat Softening Point	65°C

Approvals

Compliance/Certifications	CE / UR / cUR
---------------------------	---------------

