

PVC-U (Unplasticised Polyvinyl Chloride)

Rigid PVC Sheets & Rods — Technical Datasheet

DIODE TRADING EST
Dammam, Saudi Arabia

PVC-U is a rigid, self-extinguishing plastic with good chemical resistance and strength. It is easy to cut, weld and bond, and is widely used for chemical tanks, ducting, machine guards and electrical panels.

Specification

Material	Rigid PVC-U; PVC-C (high temperature) and clear PVC on request
Standard Colours	Grey (RAL 7011), white; clear and other colours on request
Forms	Sheets, round rods, welding rods; cut-to-size parts
Sheet Thickness	Approx. 1 mm to 50 mm
Rod Diameter	Approx. 10 mm to 200 mm
Standard Sheet Size	1000 x 2000 mm, 1220 x 2440 mm, or cut to size

Material Properties (typical values)

Property	Typical Value
Density	1.40 - 1.45 g/cm ³
Tensile strength at yield	50 - 58 MPa
Elongation at break	approx. 15%
Tensile modulus	2,800 - 3,200 MPa
Hardness	Shore D 80 - 82
Notched impact (Charpy)	2 - 4 kJ/m ²
Vicat softening point	75 - 80°C
Service temperature	0°C to +60°C
Water absorption	< 0.1%
Flammability	Self-extinguishing
Dielectric strength	25 - 35 kV/mm

Typical Applications

Chemical and water tanks, fume ducting, electroplating equipment, machine guards, electrical insulating panels, signage and fabrication.

Selection Note

PVC-U loses strength above about 60°C; choose PVC-C or PP for hotter duty.

How to Order

Send the material, grade, colour, form, dimensions (thickness / diameter, width, length) and quantity, or a drawing for machined parts, to Diode Trading EST at www.diode.sa or +966 51 083 8213. Material test certificates are available on request.

Notice: Values are typical and indicative, based on common industry grades. Exact grade, size, tolerance and performance are confirmed on quotation and against the supplier or manufacturer data and material test certificate for each batch. This sheet is not a warranty. Contact Diode Trading EST to confirm availability and specification for your application.