UPVC (Unplasticized Polyvinyl Chloride)

Plastic Sheet

UPVC (Un-plasticized Polyvinyl Chloride) is a rigid material that can be used for thermoplastic extrusion and is supplied in gray. Un-plasticised PVC is one of the stiffest polymers at ambient temperatures and is very durable.It is extremely versatile engineering plastic and can be used for profiled to suit your drawings.

Features

- The Surface Resistivity of this material is $10^{13}\Omega$
- The Tensile strength of this material is 58MPa
- The Hardness Shore D of this material is 82

Benefits and Applications

- Can be used for thermoplastic extrusion
- One of the stiffest polymers at ambient temperatures
- Extremely versatile

Availability

- Available in thicknesses from 1.5mm to 50mm thick
- Sheet sizes are 150cm x 150cm

Applications

- Appliances
- Automotive
- Industrial
- EV Batteries

Physical Properties

Property (unit)	Test Method	PPC
Specific Gravity (g/cm³)	DIN EN ISO 1183	1.44
Maximum Service temp. Upper temp limit – short term (°C)	-	60
Lower temp limit (°C)	-	0
Tensile Strength Yield (MPa)	DIN EN ISO 527	58
Elongation at Yield (%)	DIN EN ISO 527	4
Notch Impact Strength (KJ/m²)	DIN EN ISO 179	4
Hardness Shore D	DIN EN ISO 868	82
Tensile Modulus of Elasticity (MPa)	DIN EN ISO 527	3300

Mechanical Properties

Property (unit)	Test Method	PPC
Vicat Softening Point VST/B/50 (°C)	DIN EN ISO 306	74
Coefficient of Linear Thermal Expansion 23°C - 100°C (m/(m.k))	ISO 11359-2	0.8×10^{-4}
Surface Resistivity (Ω)	DIN IEC 60093	10^{13}
Dielectric Strength (KV/mm)	DIN IEC 60243-1	39
Fire Performance	UL 94	V-0

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This material is often used in these industries:

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