

DATASHEET

uPVC

uPVC has an exceptional chemical resistance, high mechanical and tensile strength whilst offering a class 1 fire rating. Together with a high degree of stability, this easily weldable product offers many industrial solutions.

Applications

- Corrosive Fluid
- Internal Wall Cladding
- Handling Tanks
- Pump & Valve Bodies
- Ventilation Systems

Availability

- Colour – Grey, White, Black, Red, Light Grey, Blue Tint
- Type – Sheets, Rods & Tubes
- Regularly produced in a wide variety of thicknesses

Typical Properties

General Properties	Method	Unit	Test Result
Physical Properties			
Specific Gravity	ISO 1183	g/cm ³	1.45
Water Absorption	ISO 62	%	<0.2
Maximum Service – Higher Temp Limit	-	°C	60
Maximum Service – Lower Temp Limit	-	°C	0
Mechanical Properties			
Tensile Strength at Yield	ISO 527	MPa	55
Elongation at Yield	ISO 527	%	3
Tensile Strength at Break	ISO 527	MPa	>45
Elongation at Break	ISO 527	%	>25
Impact Strength	ISO 179	kJ/m ²	No break
Notch Impact Strength	ISO 179	kJ/m ²	3
Ball Indentation / Rockwell Hardness	ISO 2039-1	MPa	120
Shore - D	DIN 53505	-	80
Flexural Strength	ISO 178	MPa	90
Modulus of Elasticity	ISO 527	MPa	>3500
Thermal Properties			
Vicat Softening Point VST/B/50	ISO 306	°C	80
Heat Deflection Temperature HDT/B	ISO 75	°C	-
Heat Deflection Temperature HDT/A	-	°C	72

Coefficient / Linear Thermal Expansion	DIN 53752	$K^{-1} \cdot 10^{-6}$	0.7
Thermal Conductivity at 20°C	DIN 52612	W/(m*k)	0.2
Electrical Properties			
Volume Resistivity	VDE 0303	$\Omega \times m$	-
Surface Resistivity	-	Ω	10 (13)
Dielectric Constant at 1MHz	-	-	-
Dielectric Loss Factor at 1MHz	DIN 53483	-	-
Dielectric Strength	VDE 0303	kV/mm	31
Tracking Resistance	IEC 60112	-	-
Additional Information			
Bondability	-	-	Yes
Food Compliance	FDA	-	Yes
Flammability	UL 94	-	V-0