



PVC (POLYVINYL CHLORIDE)

PVC is polyvinylchloride and comes in many different forms. In general, PVC is light, water resistant, offers a long life cycle and does not require much maintenance. These excellent qualities makes PVC one of the most commonly used plastics today. General properties include fast fusion and good property flow with high heat stability. Excellent transparency, good surface of finished products and easy colouring.

Technical Specification

	Test method	Units	U-PVC	C-PVC
Physical Properties				
Specific gravity (p)	DIN 53479	g/cm ³	1.36	1.55
Water absorption	DIN 53495	%	0.2	0.2
Chemical Resistance	DIN 53476	-	DIN 8061	DIN 8061
Max. permissible service temperature (no stronger mech. stress involved)				
upper temperature limit -		°C	60	85
lower temperature limit -		°C	-5	-5

Mechanical Properties

Tensile stress at yield	DIN 53455	MPa	55	57
Elongation at yield	DIN 53455	%	3	3
Tensile strength at break	DIN 53455	MPa	30	80
Elongation at break	DIN 53455	%	33	15
Impact strength	DIN 53453	kJ/m ²	o.B.	o.B.
Notch impact strength	DIN 53453	kJ/m ²	3	8
Ball indentation hardn. / Rockwell	DIN 53456	MPa	120	150
Modulus of elasticity	DIN 53457	MPa	3000	3000

Thermal Properties

Vicat softening temp. VST/B/50	DIN 53460	°C	75 ²⁾	105
VST/A/50 °C				
Heat deflection temperature HDT/B	DIN 53461	°C	72 ³⁾	102
HDT/A °C				
Coef. of linear therm. expansion	DIN 53752	k ⁻¹ x 10 ⁻⁴	0.8	0.6
Thermal conductivity at 20 °C	DIN 52612	W / (m*k)	0.14	0.14

Electrical Properties

Volume resistivity	DIN 53482	Ω x cm	>10 ¹⁵	>10 ¹⁵
Surface resistivity	DIN 53482	Ω	≧10 ¹³	≧10 ¹³
Dielectric constant at 1 MHZ	DIN 53483		3	3
Dielectric loss factor at 1 MHZ	DIN 53483		0.01	0.01
Dielectric strength	DIN 53481	kV/mm	20-40	20-40
Tracking resistance	DIN 53480		KB 600	KB 600

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