

## Physical properties PVC-C

General properties	Test method	Unit	Value	
Color				
Specific gravity	ISO 1183	g/cm <sup>3</sup>	1.52	
Water absorption	ISO 62	%	0.5	
Humidity absorption	ISO 62	%	0.2	
Maximum permissible service temp.	UL746B	°C	85	
Lower permissible service temp.	UL746B	°C	-15	
Flammability	UL 94		V-0	
<b>Mechanical properties</b>				
Tensile strength at yield	ISO 527	MPa	49	
Elongation at yield	ISO 527	%	5	
Tensile strength at break	ISO 527	MPa	80	
Elongation at break	ISO 527	%	15	
Impact strength	ISO 179	kJ/m <sup>2</sup>	n.b.	
Notch impact strength	ISO 179	kJ/m <sup>2</sup>	27	
Ball indentation / Rockwell hardness	ISO 2039	MPa	150	
Shore-D	ISO 868		90	
Flexural strength	ISO 178	MPa	76	
Modulus of elasticity	ISO 527	MPa	2570	
<b>Thermal properties</b>				
Vicat-softening point	VST/B/50	ISO 306	°C	114
	VST/A/50	ISO 306	°C	-
Heat deflection temperature	HDT/B	ISO 75	°C	-
	HDT/A	ISO 75	°C	105
Coef. of linear thermal expansion	ISO 11359	K <sup>-1</sup> ·10 <sup>-4</sup>		0.7
Thermal conductivity at 20 °C	ISO 22007-4	W/(m·K)		0.14
Glass transition temperature	ISO 3146	°C		110
Melting temperature	ISO 3146	°C		110
<b>Electrical properties</b>				
Volume resistivity	IEC 60093	Ω·cm		>10 <sup>13</sup>
Surface resistivity	IEC 60093	Ω		≥ 10 <sup>13</sup>
Dielectric constant at 1 MHz	IEC 60250	-		3
Dielectric loss factor at 1 MHz	IEC 60250	-		0.01
Dielectric strength	IEC 60243-1	kV/mm		40
Tracking resistance	IEC 60112	V		KB 600

This table is a valuable help in the choice of a material. The data listed here fall within the normal range of products properties, but they should not be used to establish material specification limits nor used alone as the basis of design.