PVC material data: four-grade comparison

Reported material properties | Standard clear, polar clear, anti-static and welding PVC

Property	Test method	Unit / measure	Standard clear	Polar clear	Anti-static	Welding
Density	DIN 53 479	g/cm³	1.21	1.19	1.21	1.19
Shore A hardness	DIN 53 505	Shore A	77	63	74	76
Brittle point	DIN 53 372	°C	-12	-37	-12	-11
Falling ball test	Internal test	°C / result	-10 / No break	-35 / No break	-10 / No break	-10 / No break
Flexibility	Based on DIN 51 949	°C / result	-10 / No break	-40 / No break	-10 / No break	-10 / No break
Water absorption	DIN 53 472 (50 × 5 × 7 mm)	mg / %	17 / 0.09	21 / 0.1	17 / 0.09	21 / 0.1
Tensile strength at yield	DIN EN ISO 527-2/5 A/200	MPa	17	13	17	13
Further tensile strength	DIN 53 455	N/mm²	5	2	5	2
Resistance of continued rupture	DIN 53 515	%	<5	<2	<5	<2

Thermal, optical, fire and electrical information continues on page 2.

Additional properties & test evidence

Property	Test method	Unit / measure	Standard clear	Polar clear	Anti-static	Welding
Reaction to fire	DIN 4102 / B2	Source wording	Neither burning or smoulder	Neither burning or smoulder	Neither burning or smoulder	Neither burning or smoulder
Flammability	DIN 4102 / B2	Source wording	Inflammable; self extinguishing	Inflammable; self extinguishing	Inflammable; self extinguishing	Inflammable; self extinguishing
Airborne insulation	DIN 52210	dB; thickness dependent	Approx. 30	Approx. 30	Approx. 30	Approx. 30
Light transmission / transparency	Not stated	%	>80	>80	>80	>40
Working temperature	Not stated	°C	-5 to +38	-37 to +10	Not stated	Not stated

Anti-static PVC: electrical test results

Test item: Surface Resistance & Surface Resistivity. Test method: GB/T 31838.3-2019.

Specimen	Surface resistance (Ω)	Surface resistivity (Ω/sq)
1	3.82×10^{10}	7.20×10^{11}

Data transcribed from the original technical sheets and the supplied test-result documents. Values and cited methods are retained; units and typography are standardised. Density is expressed in g/cm³ (grams per cubic centimetre)