

Polarex Colour Hygienic PVC Wall Cladding

Technical Data Sheet

Polarex Colours is a range of extruded semi-rigid PVC (PVC-U) Hygienic Wall Cladding sheet. It contains no plasticisers, no fillers and displays normal impact strength. The sheets are produced from unplasticised moulding materials according to DIN EN ISO 1163-1. They conform to the technical supply conditions (dimensions) of DIN EN ISO 11833-1. The material corresponds to the following moulding compound; ISO 1163-1 - PVC-U, EC, 074 - 05 – T28. The semi-finished materials are free from blisters, voids and are perfectly homogenous.

Product Features

Attribute	Value
Material	Semi-rigid PVC (PVC-U)
Colour	PC006, PC007, PC008, PC009, PC010, PC011, PC012, PC013, PC014, PC015, PC016, PC017, PC018, PC019, PC022, PC023, PC024
Length	2440mm or 3000mm
Width	1220mm
Thickness	2.5mm
Finish	Gloss
Jointing	Suitable for Welding or Joint Strips
Printing	Printable
Fire Rating	Class '0' (when adhered to a non-combustible substrate) Class '1' (when adhered to a combustible substrate)
Tolerance of Thickness	$\pm (0,1 + 0,03 \times s)$, s = thickness [mm], as DIN EN ISO 11833-1
Tolerance of Length	Subject to DIN EN ISO 11833-1
Tolerance of Width	Subject to DIN EN ISO 11833-1
Density	ISO 1183 (DIN 53479) g/cm ³ » 1,44
Tensile Stress at Yield	DIN EN ISO 527 (DIN 53 455) ≥ 55
Elongation at Break	DIN EN ISO 527 (DIN 53 455) ≥ 15 %
Modulus of Elasticity	ISO 527-2 (DIN 53 457) 3000 \geq MPa
Compression Strength	ISO 3605 (DIN 53 454) ≥ 70
Stress at 3,5% Strain	ISO 179 – 1ePA (DIN 53 452) ≥ 4 kJ/m ²
Impact Strength	DIN EN ISO 179 (DIN 53 453)
Notch Impact Strength	DIN EN ISO 179 (DIN 53 453) test specimen 1eA kJ/m ² 4
Ball-Pressure Hardness	ISO 2039 (DIN 53 456) ~100 MPa
Shore Hardness	D DIN 53 505 82
Vicat Softening Temperature	DIN 53460 / ISO 306 Method B 50 $\geq 75^{\circ}\text{C}$
Heat Distortion Temperature	DIN EN ISO 75 Method A $^{\circ}\text{C}$ » 65
Heat Distortion Temperature	DIN EN ISO 75 Method B $^{\circ}\text{C}$ » 70
Coefficient of Linr Expansion from -30°C to +50°C	DIN 53 752 0.08 mm/mK
Thermal Conductivity from 0°C to +60°C	DIN52612 0.16W/mK
Volumeresistivity	DIN IEC 93 / DIN VDE 0303 T30 $10^{14} \Omega \cdot \text{m}$
Surface Resistivity	DIN VDE 0303 T30 / DIN IEC 93 $10^{15} \Omega$
Glow Wire Test	IEC / DIN EN 60695-2-12 960 $^{\circ}\text{C}$ passed
Water Absorption	DIN 53 495 / <0.08 %
Temperature Range	-15 to max. 60°C
Fire Behaviour	DIN 4102-B1 – 1-3mm

The physical data given in the table were determined on the test specimens under defined conditions and represent averages values from a relatively large number of measurements. The values measured on test specimens can't be used without restriction for a prediction of the properties of finished articles, since processing and shaping have an influence on the properties.