Trovicel®, 19 / 24 mm

Trovicel® is the name for extruded integral foam sheets of rigid PVC (PVC-U), containing no plasticizer, made by the celuka procedure.

characterizing features:

- homogeneous, solid outer layers
- low weight, thus making for easy transport and assembly
- good machanical properties, extremely stable
- good insulation, lower heat transmission
- light and weathering resistance, suitable for outdoor application
- self-extinguishing after removal of the flame
- easily fabricated and machined

sizes and tolerances

size	:	3000 mm x 1250 mm x 19 mm
	:	3000 mm x 1560 mm x 19 mm
	:	3000 mm x 1250 mm x 24 mm
colour	:	white 951, other colours on request
tolerance of thickness		19 mm: ± 1,0 mm
	:	24 mm: ± 1,3 mm
tolerance of width	:	depending on the format to DIN EN ISO 11833-1
tolerance of length	:	depending on the format to DIN EN ISO 11833-1

Physical Properties

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.

Property	Standard	Test method	Unit	Trovicel® 19 / 24 mm
Mechanical Properties				
Density	ISO 1183 (DIN 53479)	–	g/cm^3	≈ 0,55
Tensile stress	DIN EN ISO 527	–	N/mm^2	–
Elongation at break	DIN EN ISO 527	–	%	–
Modulus of elasticity	ISO 178 (DIN 53 457)	–	N/mm^2	≈ 700
Flexural strength	DIN ISO 178	–	N/mm^2	20
Compression stress	DIN ISO 2039	5/10% compression	N/mm^2	2,5 / 3,0
Impact strength	DIN EN ISO 179 (DIN 53 453)	–	kJ/m^2	17
Ball-pressure hardness	ISO 2039 (DIN 53 456)	–	N/mm^2	≈ 25
Shore hardness D	DIN 53 505	–	–	≈ 80
Thermal Properties				
Vicat softening temperature	DIN EN ISO 306	Method A 50	°C	75
Coefficient of linear expansion	DIN 53 752	20 to 60°C	K^{-1}	$\approx 75 \cdot 10^{-6}$
Heat transfer coefficient (K-Value)	DIN 4108, part 5	–	–	2,2 / 1,7
Thermal conductivity at 20°C	DIN 52 616	–	$W/(m \cdot K)$	0,068
Electrical properties				
Surface resistivity	DIN IEC 60093 VDE 0303-30	–	Ω	$> 10^{13}$
other properties				
Water absorption	DIN 53 495 / ISO 62	7 days at 23°C	%	≤ 0,2
Temperature range for application	–	Classification	–	0 to 60°C
Weather stability Classification	DIN 53387, dosing 0,8 MJ/cm²	DIN 54001 grey-scale (5 – 1)		position 4 – 3
Physiological indifference	–	–	–	no
sound attenuation	DIN 52210	–	db	32 / 35
Fire behaviour	DIN 4102 (D)	–	–	B2
	NFP 92-501 (F)	only 19 mm	–	M1