

Vivak® UV

Solid Copolyester Sheets



Your benefits:

- good weather resistance
- excellent thermoformability
- good impact strength
- good fire rating

Solid **Vivak® UV** sheets are made of thermoplastic copolyester. They offer high impact strength, a good fire rating and good weather resistance. These properties are demonstrated by our 10-year guarantee on mechanical strength and optical properties.

Vivak® UV sheets can be rapidly thermoformed at low energy consumption, short production times, extreme degrees of stretching and accurate mold surface reproduction, without predrying. The sheets are easy to screen print and machine.

Vivak® UV clear 2099 is a grade of clear transparent sheet with extremely high light transmission and high gloss.

Vivak® UV white 2130 sheets are translucent white sheets with good light diffusion and a pleasant hue.

Applications:

Ideal fields of application for **Vivak® UV** are: Outdoor P.O.S., displays, poster pillars, vending machines, poster boards and outdoor posters, advertising boards.

	Test Conditions	Typical values ⁽¹⁾	Unit	Standard
PHYSICAL				
Density		1.27	g/cm ³	ISO 1183-1
Moisture absorption	after storage in standard climate 23 °C/50% RH	0.2	%	ISO 62-4
	after storage in water at 23 °C until saturation	0.6	%	ISO 62-1
Refractive index	20 °C	1.567	-	ISO 489
MECHANICAL				
Tensile stress at yield		> 45	MPa	ISO 527-2/1B/50
Elongation at yield		4	%	ISO 527-2/1B/50
Tensile strength		> 45	MPa	ISO 527-2/1B/50
Elongation at break		> 35	%	ISO 527-2/1B/50
Elastic modulus		2,000	MPa	ISO 527-2/1B/1
Limiting flexural stress		ca. 80	MPa	ISO 178
Impact strength	Charpy, unnotched	no break	kJ/m ²	ISO 179/1fU
	Charpy, notched	ca. 7	kJ/m ²	ISO 179/1eA
	Izod, notched	ca. 6	kJ/m ²	ISO 180/1A
THERMAL				
Vicat softening temperature	Method B50	80	°C	ISO 306
Thermal conductivity		0.2	W/m K	DIN 52612
Coeff. of linear thermal expansion		0.05	mm/m K	DIN 53752-A
Heat deflection temperature under load	Method A: 1.80 MPa	63	°C	ISO 75-2
	Method B: 0.45 MPa	70	°C	ISO 75-2
ELECTRICAL				
Dielectric strength		16.1	kV/mm	IEC 60243-1
Volume resistivity		10 ¹⁵	Ohm·cm	IEC 60093
Surface resistivity		10 ¹⁶	Ohm	IEC 60093
Dielectric constant		2.6		IEC 60250
	at 10 ³ Hz	2.4		IEC 60250
	at 10 ⁶ Hz	0.005		IEC 60250
Dissipation factor	at 10 ³ Hz	0.02		IEC 60250
	at 10 ⁶ Hz			

⁽¹⁾ These values are measured on injection molded samples, and are not intended for specification purposes.