

Axpet® UV Solid Polyester Sheets.

Your benefits:

- good impact strength
- high light transmission
- good weather resistance

Solid **Axpet® UV** sheets are made from thermoplastic polyester with UV protection on both sides. They offer high impact strength and a good fire rating. Axpet® UV is resistant to chemicals and fully recyclable.

Axpet® UV clear 2099 sheets are clear-transparent and offer high light transmission and gloss.

Applications:

Ideal fields of outdoor applications for Axpet® UV are: poster glazing, poster boards (also backlit), direction signs, promotional symbols, flat machine guards.

The sheets can be machined and screen printed with ease. Owing to the crystallization properties of polyester, the sheet may turn white during thermoforming. Line-bent Axpet® UV sheets show a hinge effect.

	Test Conditions	Typical Values	Unit	Test Method
PHYSICAL				
Density		1.33	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	0.5	%	ISO 62-1
Refractive index	20 °C	1.585	–	ISO 489
MECHANICAL				
Tensile stress at yield		> 55	MPa	ISO 527-2/1B/50
Elongation at yield		4	%	ISO 527-2/1B/50
Tensile strength		> 55	MPa	ISO 527-2/1B/50
Elongation at break		> 25	%	ISO 527-2/1B/50
Elastic modulus		2500	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. 4	kJ/m ²	ISO 179/1eA
	Izod, notched	ca. 3	kJ/m ²	ISO 180/1A
THERMAL				
Vicat softening temperature	Method B50	75	°C	ISO 306
Thermal conductivity		0.25	W/m °C	DIN 52612
Coeff. of linear thermal expansion		0.05	mm/m °C	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		60	kV/mm	IEC 60243-1
Volume resistivity		10 ¹⁵	Ohm-cm	IEC 60093
Surface resistivity		10 ¹⁶	Ohm	IEC 60093
Dielectric constant	at 10 ³ Hz	3.4		IEC 60250
	at 10 ⁶ Hz	3.1		IEC 60250
Dissipation factor	at 10 ³ Hz	0.015		IEC 60250
	at 10 ⁶ Hz	0.056		IEC 60250

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Light Transmission:

Test Method to DIN 5036

The stated thicknesses are not all available as standard. Please ask us for more information. The stated values are typical values only.

Light transmission in %	1	2	3	4	5	6
Axpet® UV clear 2099	89	88	87	86	85	84

Available Sizes:

Axpet® UV is available in thicknesses of 1–6 mm and in the following sizes; other sizes and sheet thicknesses on request.

Colors:

Axpet® UV clear 2099

Sizes (Standard):

2,050 x 1,250 mm

3,050 x 2,050 mm

Permanent Service Temperature:

The permanent service temperature is approx. 60 °C.

Fire Rating:

Oxygen index (LOI) 25 % ISO 4589

Technical information:

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