

Axpet® Solid Polyester Sheets.

Your benefits:

- good impact strength
- good fire rating
- suitable for food-contact applications

Applications:

Ideal fields of indoor application for Axpet® are: P.O.S (displays, price tag holders, shelf partitions), poster glazing, poster boards (also backlit), direction signs, promotional symbols, food containers and trays, decorative inserts, pharmaceutical products, 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® sheets show a hinge effect.

Solid **Axpet®** sheets are made from thermoplastic polyester. They offer high impact strength, a good fire rating and are suitable for food-contact applications. Axpet® is resistant to chemicals and fully recyclable.

Axpet® clear 099 is a grade of clear-transparent sheet with high light transmission and gloss.

Axpet® white 100 is a white sheet that is opaque even in small thicknesses.

Axpet® white 130 is a translucent sheet grade offering good light diffusion combined with a pleasant white color.

	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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Axpet® Solid Polyester Sheets.

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 %	0,8	1	1,5	2	3	4	5	6
Axpet® clear 099	90	89	89	88	87	86	85	84
Axpet® white 100		< 2		< 1	< 1			
Axpet® white 130		28	28	28	28	28		

Available sizes:

Axpet® is available in thicknesses of 0.8–6 mm and in the following sizes; other sizes and sheet thicknesses on request.

Colors:

Axpet® clear 099

Axpet® white 100

Axpet® white 130

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

Country	Standard	Rating	Thickness	Color
Germany	DIN 4102	B 1 (indoors)	0.8–6 mm 1–4 mm	clear 099 white 130
	IEC 695-2-1 (glow-wire test)	960 °C	0.8; 2 and 5 mm 2 mm	clear 099 white 130
U.K.	BS 476 Part 7	Class 1Y	3 mm	clear 099
France	NF P 92-501 & 505	M 2	0.8–6 mm 1–4 mm	clear 099 white 130
	NF P 16 101 & 102	F 1	0.8–4 mm 1 and 2 mm	clear 099 white 130

Technical information:

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