

Axpet® GP rECOplus

Solid polyester sheet with circular content



Your benefits:

- contains 25% post-consumer recycled content
- good impact strength
- suitable for food-contact applications

Solid **Axpet® GP rECOplus2** sheets are made from thermo-plastic polyester and contains 25% of post-consumer recycled content. By integrating post-consumer waste materials into the sheet, the material has a lower ecological footprint and improves sustainability.

Axpet® GP rECOplus2 offers high impact strength and a good fire rating. It is resistant to chemicals and fully recyclable.

Axpet® GP rECOplus2 clear 099 is a clear-transparent sheet with good light transmission and gloss. It can be used for food-contact applications.

Applications:

Ideal fields of indoor application for **Axpet® GP rECOplus2** 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, 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® GP rECOplus2** sheets show a hinge effect and are ideal for cold folding.

	Test Conditions	Typical values	Unit	Standard
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		2,500	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 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		17	kV/mm	IEC 60243-1
Volume resistivity		10 ¹⁵	Ohm·cm	IEC 60093
Surface resistivity		10 ¹⁶	Ohm	IEC 60093
Dielectric constant		3.4		IEC 60250
	at 10 ³ Hz	3.1		IEC 60250
	at 10 ⁶ Hz	0.015		IEC 60250
Dissipation factor	at 10 ³ Hz	0.056		IEC 60250
	at 10 ⁶ Hz			IEC 60250

The mechanical properties were measured on sheets of 4 mm thickness.

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Exolon Group ECORANGE represents a line of products which attribute to improved sustainability by having a lower ecological footprint.

Light Transmission:

Test method according to DIN EN ISO 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	2	3
Axpet® GP rECOplus2 clear 099	86	85	81	76

Available sizes: Axpet® GP rECOplus2 is available in thicknesses of 0.8-3 mm and in the following sizes; other sizes, colors and sheet thicknesses on request.

Colors:

Axpet® GP rECOplus2 clear 099

Sizes (standard):

3,050 x 2,050 mm

Food compatibility

Axpet® GP rECOplus2 clear 099 can be used for food-contact applications

Permanent Service Temperature:

The maximum permanent service temperature without load is approx. 60°C.

Sustainability

The Exolon Group is committed to sustainability and protecting the environment, and actively supports and promotes developments which reduce the environmental impact of its products. **Axpet® rECOplus** is a partially circular product: it contains 25% of post-consumer waste. This means that it contains 25% of polyester from products which have reached their end-of-life and are recycled back into this new material.



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