

Product data sheet. October 2024

Vivak® GP ECO

Solid copolyester sheet with reclaimed content



Your benefits:

- guaranteed with a fixed percentage of reclaimed content
- excellent thermoformability
- suitable for food-contact applications
- good fire rating

Solid **Vivak® GP ECO** heets are made of premium thermoplastic copolyester (CHDM-based PET-G) and contain a fixed percentage of own reclaimed content. They offer high impact strength, a good fire rating and are fully recyclable.

Vivak® GP ECO is a clear transparent sheet with extremely high light transmission and high gloss. It contains at least 40% reclaimed material out of our own production. **Vivak® GP ECO** can be used for food-contact applications.

Applications:

Ideal fields of application for **Vivak® GP ECO** are: P.O.S. (displays, price tag holders, shelf partitions), direction signs, promotional symbols, food containers and trays, flat and formed machine coverings, partitions.

Vivak® GP ECO can be rapidly thermoformed at low energy consumption, short production cycles, extreme degrees of stretching and accurate mold surface reproduction, without predrying. The sheets are easy to screen print, 3D-print and machine.

Our commitment: Vivak® GP ECO has the same high quality as our standard sheets regarding optical and mechanical performance. By using selected reclaimed material of excellent quality we are able to maintain the typical properties of the material.

	Test Conditions	Typical values	Unit	Standard
PHYSICAL Density Moisture absorption Refractive index	after storage in standard climate 23 °C/50 %r.F. after storage in water at 23 °C until saturation 20 °C	1.27 0.2 0.6 1.567	g/cm³ % %	ISO 1183-1 ISO 62-4 ISO 62-1 ISO 489
MECHANICAL Flexural strength Tensile modulus Yield stress Yield strain Strain at break Charpy	23 °C unnotched -40 °C unnotched 23 °C notched	70 2,200 > 50 4 > 35 no break no break ca.7	MPa MPa MPa % % kJ/m² kJ/m²	ISO 178 ISO 527-1/-2 ISO 527-1/-2 ISO 527-1/-2 ISO 527-1/-2 ISO 179-1/1eU ISO 179-1/1eJ
Izod	23 °C unnotched 23 °C notched	no break ca. 7	kJ/m² kJ/m²	ISO 180/U ISO 180/A
THERMAL Vicat softening temperature Thermal conductivity Coeff. of linear thermal expansion Heat deflection temperature under load	Method B: 0.45 MPa Method A: 1.80 MPa Method B: 0.45 MPa	80 0.2 0.05 63 70	°C W/m K mm/m K °C °C	ISO 306 DIN 52612 DIN 53752-A ISO 75-2 ISO 75-2
ELECTRICAL Dielectric strength Volume resistivity Surface resistivity Dielectric constant Dissipation factor	at 10 ³ Hz at 10 ⁶ Hz at 10 ³ Hz at 10 ⁶ Hz	16.1 10 ¹⁵ 10 ¹⁶ 2.6 2.4 0.005	kV/mm Ohm·em Ohm	IEC 60243-1 IEC 60093 IEC 60093 IEC 60250 IEC 60250 IEC 60250 IEC 60250

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



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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 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 %	1.5	2	2.5	3
Vivak® GP ECO clear 099	90	89	89	88

Available sizes:

Vivak® GP ECO clear 099 is available in thicknesses of 1.5 - 3 mm.

Our standard sizes are the dimensions: 2.050 x 1.250 mm and 3.050 x 2.050 mm.

Please contact us, if you need other dimensions.

Thermoforming:

Due to their excellent flow properties and mold surface reproduction, **Vivak® GP ECO** sheets can be thermoformed at low temperatures without predrying. Because of its low specific heat capacity, **Vivak® GP ECO** requires little energy for thermoforming.

Permanent Service Temperature:

The maximum permanent service temperature without load is approx. $65\,^{\circ}\text{C}$.

Food compatibility
Vivak® GP ECO can be used for food-contact

Fire Rating (*):

Country	Standard	Rating	Thickness	Color
Europe	EN13501-1	B-s1, d0	2 - 3 mm	clear 099

(*) fire certificates are limited in time, always check if the mentioned certificate is still valid.

Exolon Group also produces multiwall sheets in polycarbonate (Exolon® multi UV), and solid sheets in polycarbonate (Exolon® GP) and in polyester (Axpet®, Curvalite® and Inspria®). For more information, take a look at www.exolongroup.com.



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