

Vivak® GP rECOplus

Solid copolyester sheet with circular content



Your benefits:

- contains up to 100% post-consumer recycled content
- excellent thermoformability
- suitable for food-contact applications
- good fire rating

Solid **Vivak® GP rECOplus** sheets are made of thermoplastic copolyester and contain up to 100% post consumer recycled content. They offer high impact strength, a good fire rating and are fully recyclable.

Vivak® GP rECOplus clear 099 is a clear transparent sheet with extremely high light transmission and high gloss. It can be used for food-contact applications.

Vivak® GP rECOplus is a circular grade which contains up to 100% of post-consumer recycled content. The share of post-consumer content is attributed via mass balance according to ISCC PLUS Standard. The sheets have the same high quality, both optical and mechanical, as **Vivak®** sheets made from virgin material.

Applications:

Ideal fields of application for **Vivak® GP rECOplus** 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 rECOplus 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 rECOplus has the same high quality as our standard sheets regarding optical and mechanical performance.

	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/cm ³ % % –	ISO 1183-1 ISO 62-4 ISO 62-1 ISO 489
MECHANICAL Tensile stress at yield Elongation at yield Tensile strength Elongation at break Elastic modulus Limiting flexural stress Impact strength	Charpy, unnotched Charpy, notched Izod notched	> 45 4 > 45 > 35 2,020 ca. 80 no break ca. 7 ca. 6	MPa % MPa % MPa MPa kJ/m ² kJ/m ² kJ/m ²	ISO 527-2/1B/50 ISO 527-2/1B/50 ISO 527-2/1B/50 ISO 527-2/1B/50 ISO 527-2/1B/1 ISO 178 ISO 179/1fU ISO 179/1eA ISO 180/1A
THERMAL Vicat softening temperature Thermal conductivity Coeff. of linear thermal expansion Heat deflection temperature under load	Method B50 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 ⁵ Hz at 10 ³ Hz at 10 ⁶ Hz	16.1 10 ¹⁵ 10 ¹⁵ 2.6 2.4 0.005 0.02	kV/mm Ohm·cm Ohm 	IEC 60243-1 IEC 60093 IEC 60093 IEC 60250 IEC 60250 IEC 60250 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 13468. The stated values are typical values only.

Light transmission in %	1	1.5	2	2.5	3	4	5	6	8	10	12	15
Vivak® GP rECOplus clear 099	90	90	89	89	88	88	87	86	85	84	80	80

Availability:

This material is available in 2 versions:

Vivak® GP rECOplus5 clear 099:

contains 50% post-consumer content

Vivak®GP rECOplus10 clear 099:

contains 100% post-consumer content

Vivak® GP rECOplus clear 099 is available in thicknesses of 1 - 15 mm.

Our standard sizes are the dimensions:

2,050 x 1,250 mm and 3,050 x 2,050 mm.

Other colours are on request.

Thermoforming:

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

Permanent Service Temperature:

The maximum permanent service temperature without load is approx. 65 °C.

Food compatibility

Vivak® GP rECOplus clear 099 can be used for food-contact applications.

Fire Rating (*):

Country	Standard	Rating	Thickness	Color
Europe	EN13501-1	B-s1, d0 B-s2, d0	2 - 10 mm 2 - 6 mm	clear 099 all colours

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

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. **Vivak® GP rECOplus** is a sheet with circular post-consumer waste content up to 100%, monitored via ISCC PLUS.



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



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