

Multi-faceted variety.
Always in good shape.

VIVAK[®]
axpet[®]

Covestro. Plastics for creativity.



Many years of experience combined with expertise and know-how

The Covestro Sheet Europe network is part of Covestro AG, active worldwide. It bundles many years of experience, expertise and know-how in the development, production and marketing of high-quality multi-wall and solid sheets. Our customers receive intelligent solutions for durable sheet material to the highest quality standard, certified according to EN ISO 9001.

Under the trademark Vivak®, we offer copolyester solid sheets which can turn your three-dimensional visions into reality. The Axpet® polyester solid sheets possess excellent cold-curving properties, and are available in either transparent or translucent, depending on your design concept.

Furthermore, we also offer transparent and translucent polycarbonate multiwall and solid sheets under the Makrolon® brand and opaque sheet material under the Bayloy® and Bayblend® brands.

Special diffuser sheets for LED applications and our SilentSound® solid sheets for use in sound-proofing walls, together with other specialised items, complete our product portfolio. Professional service and the readiness to respond to our customers' market requirements make Covestro a reliable partner for trade and industry.

Whether for mechatronics, architecture, trade fairs or shop fittings, Covestro offers plastic sheets for all conceivable applications. Just ask us for more information.

Vivak® and Axpet® –
plastic sheets to meet the highest requirements.

Benefits designed to inspire:

- Easy to shape
- Excellent break resistance and impact strength
- Flame-retardant
- Food safe
- Resistant to chemicals
- Halogen-free and recyclable
- Weather-resistant and durable (VIVAK UV)

Vivak® und Axpet® – polyester plastic sheets at a glance. Give free rein to your creativity

Product	Type	Colour	Properties	Thickness in mm
Vivak®	099	clear transparent	standard type	0,5 - 15
	850	bronze transparent		
Vivak UV®	2099	clear transparent	UV-protected 10-year guarantee	2 - 12
	2130	white translucent		2 - 12
Axpet®	099	clear transparent	standard type	0,8 - 5
	130	white translucent		1 - 4
Axpet NR®	099	clear transparent	anti-reflection	0,8 - 2

Depending on their thickness, colour and application, polyester sheets satisfy the requirements of many national fire prevention standards. Fire behaviour can be influenced by ageing and the amount of weathering. You will find detailed information in the technical product documentation.







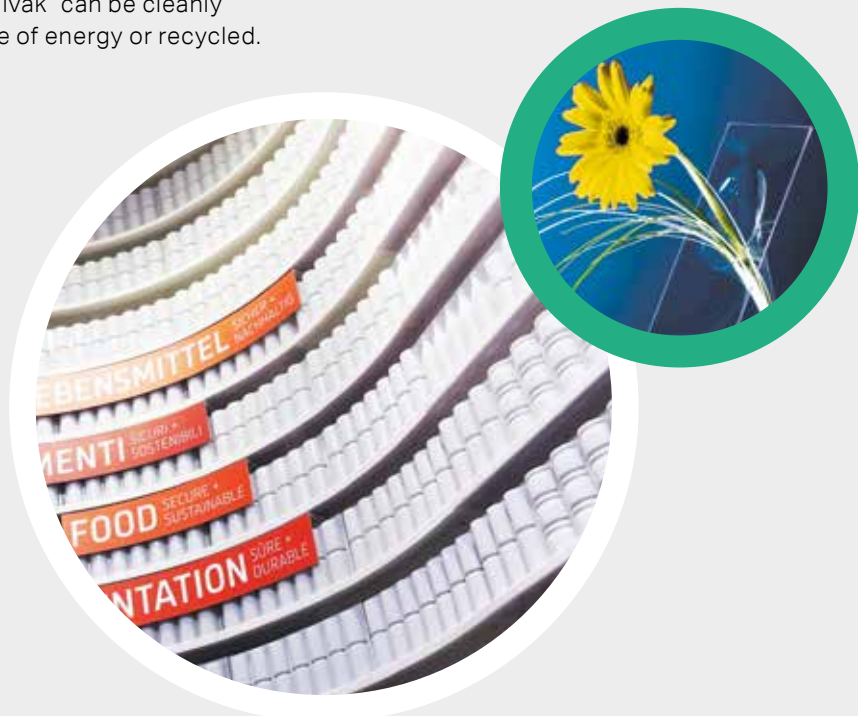
Vivak® and Axpert® – facts on shaping perfection.

All the benefits – Vivak® sheets are

- **Easy to shape.**
The thermoforming properties ensure minimum energy consumption and short production times. The sheets do not require pre-drying before use. This time-saving feature also helps to keep costs down.
- **Good impact strength.**
Vivak® has good break resistance and impact strength, even at low temperatures.
- **Flame-retardant.**
Because of its certified fire classification according to international standards, Vivak® is always a safe choice for many applications.
- **Food safe.**
Vivak® clear 099 sheet types can be used for the presentation, storage and transport of food products.
- **Halogen-free and recyclable.**
At the end of its life cycle, Vivak® can be cleanly sorted and used as a source of energy or recycled.

At a glance – Axpert® sheets are

- **Easy to shape.**
Its special cold-curving properties include a hinge effect for folded sheets.
- **Good break resistance and impact strength.**
The good impact strength cuts out costly sheet replacement and the associated transport costs.
- **Resistant to chemicals.**
Material resists even aggressive substances.
- **Flame-retardant.**
Having passed certified fireproofing tests, Axpert® is also one of the safest solutions for many applications.
- **Suitable for food-contact applications.**
Axpert® clear 099 sheets are safe to use with food products.
- **Halogen-free and fully recyclable.**



Vivak® copolyester sheets – create flowing, dream-like shapes.

For your thermoformable ideas

Vivak® sheets are especially light, break and impact-resistant even at low temperatures, weather-resistant and highly transparent. These sheets are easily printable and highly suitable for food-contact applications. Because they can easily be thermoformed, energy consumption is kept down whereas productivity is high.



The thermoformable sheet: Vivak®

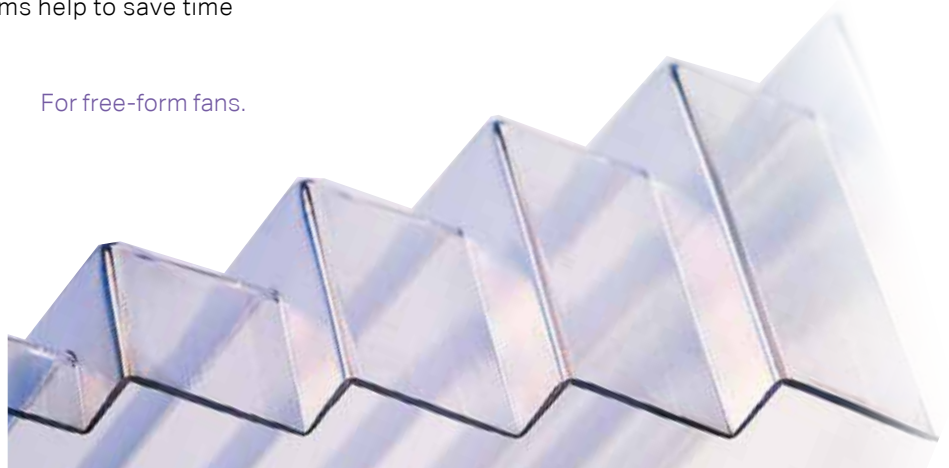
Vivak® the thermoformable plastic sheet, is available in a variety of thicknesses and colours. These versatile copolyester sheets combine superior thermoforming properties with very good mechanical characteristics. Vivak® sheets can be thermoformed into any desired shape. They offer almost unlimited freedom of design when making three-dimensional parts. Shorter production times and less material wastage when creating complex forms help to save time and keep costs down.

For free-form fans.

The weather-resistant sheet: Vivak® UV

Vivak® UV sheets are particularly weather-resistant and ideal for exterior applications. As an added extra in addition to these properties, they come with a 10-year warranty on impact strength, clarity and transparency.

For outdoor fans.





Sheet colours may differ from printed ones. Further information can be found in our ColorLine documentation.



The coloured sheet: Vivak® ColorLine

Enjoy the freedom to design in colour with Vivak® ColorLine and experience the wealth of transparent options for your innovative use of space. Because ColorLine boasts truly fantastic colours and inspires you to create in colour.

As standard, 20 colours are available in thicknesses of 2-8 mm. Other colours and thicknesses are available on request. Even small projects can easily be planned and implemented with ColorLine – both indoors and outdoors.

For all who think in colour.



Axpet® polyester sheets – for corners and edges.

The flexible cold bending plastic sheet

Their cold bending properties, excellent chemical resistance, flexibility and consistently high quality make Axpet® sheets truly impressive. This is due to the carefully selected raw material, an extensive quality management system and production processes certified according to EN ISO 9001. Since they are light and inexpensive to process, these sheets offer an excellent alternative to other high-performance plastic sheets.



The durable and precise sheet: Axpet®

The Axpet® brand features transparent cold-bending plastic sheets. They are available in clear transparent and white translucent versions. For non-reflecting applications, you can choose the product type Axpet® NR, which is fitted with a non-reflecting matt surface on one side.

Thanks to their excellent fatigue strength, the sheets can be used in the same way as carton or full-strength cardboard, for example for folding displays. By adding a fold or a flute to the sheet and folding along this line, a kind of hinge can be created which can be opened and closed thou-

sands of times without breaking. Adding a fold or flute without folding the material enables fold-out displays to be created. These can be sent to the user unfolded so that they can be folded before use. This cuts down on packing, storage and transport costs.





Because of its fire classification, Axpel® is the perfect material for indoors, whether for point-of-sale applications, poster holders, placards, signage, containers and trays for food products, decorative applications or for food product packaging. And if you like bright colours, you will love the fact that the materials are easy to process and perfect for silk-screen printing.

For idea-hungry folding specialists.



Vivak® and Axpet® – simply safe

Both types of solid sheets can easily be processed with conventional tools.

- Sawing
- Cutting
- Stamping
- Drilling
- Milling
- Embossing
- Laser cutting
- Forming
- Cold-edging (Axpet®)

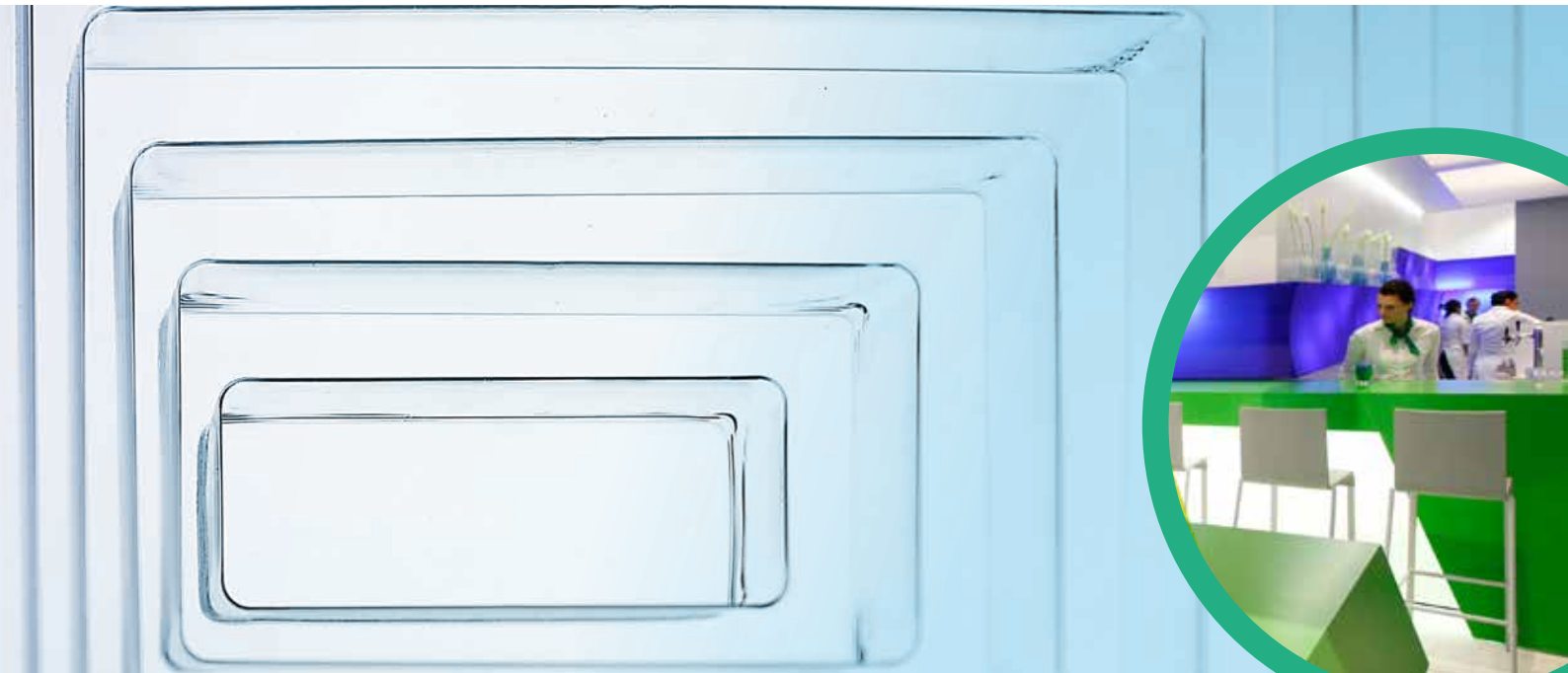


Surface finishing

Depending on the application and area of use, the sheets can be finished by painting, silk-screen, transfer printing or flame polishing.

Detailed information on processing can be found in our technical documentation on the topics 'Machining and forming'.

Vivak® and Axpet® – for future-ready environmental models.



Environmental considerations always at the forefront

Thanks to their properties, Vivak® and Axpet® are used for high-quality and durable consumer goods. They stand apart from classical consumer goods and disposable items. Their durability ensures that full functionality is retained even after many years of use and they do not have to be replaced prematurely.

At the end of their life cycle, both materials can be sorted cleanly and used as a source of energy or recycled. If used as a source of energy, the resulting heat is either used directly or harnessed to generate power. Since polyester contains only carbon, water and oxygen, it burns very cleanly.

Recycling means that both polyesters can be cleanly sorted, re-granulated and fed back into the extrusion process.

Stages of re-use

In primary recycling, the material offcuts of our products, which have not yet left the plant, are sorted, re-granulated and re-used in special products. This process has been practised for years and results in no loss of quality.

In the case of secondary recycling, offcuts are collected by certified recycling companies and similarly passed on for recycling or use as an energy source.

The final stage is when parts made from Vivak® or Axpet® are recycled at the end of their useful life. In this case, the most efficient re-use is as a source of energy, exploiting the calorific value of the material as a source of energy. This service can also be provided by recycling companies.

Vivak® and Axpet® –
clean solutions right from the start.



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The manner in which you use and the purpose to which you put and utilize our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations are beyond our control. Therefore, it is imperative that you test our products, technical assistance, information and recommendations to determine to your own satisfaction whether our products, technical assistance and information are suitable for your intended uses and applications. This application-specific analysis must at least include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been done by Covestro.

All information and technical assistance is given without warranty or guarantee and is subject to change without notice. Any statement or recommendation not contained herein is unauthorized and shall not bind us. Nothing herein shall be construed as a recommendation to use any product in conflict with any claim of any patent relative to any material or its use. No license is implied or in fact granted under the claims of any patent.

With respect to health, safety and environment precautions, the relevant Material Safety Data Sheets (MSDS) and product labels must be observed prior to working with our products.

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