



Your **Personal Coating** Solution



Dynamically into the future

These are exciting times at CaPlast. We are putting sustainability within our entire value-added chain at the heart of our priorities. On page 3 you can learn more about it.

However, the issue of sustainability also entails the integration of functionalities such as the absence of pollutants, weight reduction, fire protection, UV stability and ability to withstand outdoor exposure. We continue to focus on more sustainable thermoplastics through the introduction of an entirely new product line. The recyclable, lightweight and translucent TPO-based CaLiner canopy is not just the headline topic in this edition of CaPlast News but also our main product at the Techtextil 2019 trade fair. We made great progress in our goal to be one-stop-shop through, a brand new product in the form of hot melt adhesive films. We present the high-quality, thermoplastic adhesive films to you on page 3.

Last, but not least, we can provide you with some very exciting news about our company. Following a reorganisation we are now part of the KAP | flexible films technology segment of our parent company. You can discover the benefits this strong team provides you with on page 4.

We look forward to further discussions with you. Simply arrange an appointment by mailing us at verkauf@caplast.de.

NEW Strong and light at the same time: TPO-based CaLiner fabric tarpaulin

The new CaLiner fabric tarpaulin fulfils three key market demands upon a product. UV stability, excellent tear resistance and low flammability. In the past, when polyolefins were used as a basis, it was not possible.

Tarpaulins for greenhouses, agricultural buildings, large tents, mobile stadia, ship tarpaulins, pool covers, bulk packaging and much more besides are one of PVC's last strongholds.

We wanted to change this, because weight, rigidity, added plasticisers, the development of toxic fumes in case of fire and the difficult recyclability of it represent just a few of the disadvantages associated with this material. Thus, we set about redefining textile construction.

Our solution is **CaLiner**.

"The new tarpaulin for greenhouses with an innovative copolymer coating not only wins over users in terms of its functionality, but also aesthetically by virtue of the high levels of light transmittance," explains sales manager Jan van Egten.

CaLiner can be produced in exact accordance with the customers' desired properties in terms of its UV and weather resistance, water resistance, transparency, tensile strength or fire resistance.

What's more, the tarpaulins are entirely recyclable. Due to the lower specific gravity of polyolefins, a **CaLiner** tarpaulin is light and easy to handle.

CaLiner advantages at a glance:

- 20 % lighter, a 50 % longer service life than comparable rival products
- Robust and excellent tensile strength
- High levels of light transmission
- Good flammability properties
- Flexible and easy to use
- Can be welded and glued
- For temperatures down to -30 °C
- 100 % recyclable
- No expansion of the material at high temperatures
- Free of plasticisers and solvents
- Easy to clean with soap and water
- Appropriate for contact with foods
- Various colours possible



The development and production of high-quality thermoplastic adhesive films complement the integrated product range for flexible films applications.

We come across hot-melt adhesive foils almost everywhere we go: In our car interior, in the awning on the terrace, in our sports and functional clothing, on our plastic cards or in the doormat before our front door. Following the heat activation, they create a permanent bond between different materials such as plastic, wood or metal within a matter of seconds. Textiles are seamlessly welded, seams bonded, surfaces finished.

Important industry applications

- Car interior: Roof linings, footwell trims, manufacture of car seats
- Clothing: Shirt collar reinforcement, sports and leisure garments, seamless clothing, flex and flock films
- Technical textiles: Sunshade and awning bonding, veneer edges and anti-slip
- Technical bonding of/with metals

Advantages at a glance

- Odourless, solvent-free, offers low levels of fogging
- Precise and even surface application, complete wetting
- Reliable in relation to the process
- Continuously unreeled from the roller or as a single bonding
- A strain can be placed on the glue joint immediately following the bonding process

Boundless functionality

The choice of materials depends on the functionality and the desired properties such as heat resistance, wash resistance, chemical cleaning resistance, high frequency weldability, adhesion properties, barrier properties, mechanical resistance, UV resistance, ductility, breathability, elasticity and the surface properties. The following materials are used for instance CoPolyamides, CoPolyesters, EVAC, grafted polyolefins and Thermoplastic polyurethanes (TPUs). CaPlast hot melt adhesive films can be optionally extruded on release paper, release films or customer-specific carrier materials.

In principle we abide by the motto of: Nothing is impossible. Simply talk to us about your application. Dr. Reichherzer, +49 2599 9130

On the way to the closed-loop economy

In 2015, the European Commission launched an action plan designed to accelerate Europe's transition to a closed-loop economy. As a responsible company we look forwards to accomplishing this major macroeconomic task with confidence.

All the companies in the plastics processing industry agree on one point: our industry plays a key role in ensuring the transformation from a linear economy to a sustainable closed-loop economy. We still have to perform a large amount of research and work persuading people. However, innovations in the development of new biopolymers and advanced environmental technology are already making a lot of things possible, and numerous sustainability projects have thus also been initiated at CaPlast.

The use of natural resources

Cellulose, sugar cane, molasses, starch, vegetable oils, but also wood fibres and flax, are currently the most commonly used raw materials for the production of bio-based biopolymers. At CaPlast, we are keenly observing the further developments in terms of processing behaviour, functionality and degradability and have already tested the first materials in relation to their suitability for coating at our technical centre. That's because one thing goes without saying: bio-based materials also have to demonstrate outstanding results in terms of their UV stability, fire behaviour, longevity and recyclability.

Biopolymers as the focal point of our development work

- Biodegradable bioplastics from fossil fuels
- Compostable and / or biodegradable bioplastics derived from renewable raw materials of animal and plant origin and also from microorganism synthesis

CaPlast's sustainability goals at a glance

- Further development of recyclability towards the sorted recycling of homogeneous materials
- Sustainability throughout the entire value-added chain
- Absence of pollutants
- Use of compostable and / or degradeable biopolymers

You would like to know more about the potential applications of biopolymers for technical textiles? Simply talk to us! Caplast Kunststoffverarbeitungs GmbH Sales, +49 2599 9130



KAP | flexible films - Europe's leading extrusion coating specialist

CaPlast has been a member of the KAP AG corporation, a listed mediumsized industrial group with around 3,000 employees worldwide since 1990. The reorganisation of the company was successfully concluded at the end of 2018 upon the appointment of a segment manager. The organisational restructuring forms an integral part of the new segment strategy, which aims to optimise processes, harness synergies and further increase profitability within the five segments of engineered products, flexible films, surface technologies, IT / services and precision components.

In the five KAP technology segments, high-performance, medium-sized companies are now pooling their expertise and jointly developing into highly specialised market leaders. CaPlast is a part of technology segment of **KAP | flexible films**. The segment manager and Managing Director of CaPlast, Frederik Schaefer, talks in an interview about the advantages for customers and business partners.

What is KAP | flexible films?

Schaefer: "Firstly an exciting challenge and a great responsibility. However, it is above all a logical measure, which offers huge opportunities. In the new flexible films technology segment, five strong companies in the extrusion technology sector combine their expertise in the field of thermoplastic extrusion using different processing technologies. In this way a market leading specialist in the extrusion technology field has emerged which creates genuine added valued for its customers. Within this segment, we have laid the foundations for further growth combined with high agility."

Which products does flexible films offer?

Schaefer: "flexible films now already occupies market-leading positions in attractive niche markets and we wish to expand these further. In the field of fabric-reinforced pool liners, for instance, which under the brand name, Elbe Pool Surface, are synonymous with the highest quality in more than 65 countries. In the other niche markets, such as roofing, tarpaulins, automotive, canvases and technical packaging, we do not sell ready-made products but develop customised solutions in collaboration with our partners, so we act as development and manufacturing partner for market-leading companies. The opportunities offered by the segment significantly increase the basis for meeting the heterogeneous needs of our customers in the best possible manner."

What are the advantages of this for the customer?

Schaefer: "The combination of different extrusion technologies such as slot extrusion, calendering or flat die extrusion results in numerous synergistic effects that benefit the customer. The most important is probably the fact that prior restrictions in relation to the existing technology have been eliminated. Thanks to a cross-segment sales team, our customer now has a central contact person who can offer solutions based on the most suitable production technology. The customer thus profits from much broader expertise in relation to thermoplastics and the respective application areas."





Unique customer benefits through the bundling of competences

- Strong technology partner of global blue chip companies with total turnover in excess of € 90 million and more than 330 employees
- Profound understanding of thermoplastics and their functionalities and fields of application (e.g. PVC, TPU, copolymers, PA, copolyester etc.)
- State-of-the-art production facilities
- Deep-rooted research ethos as the basis for joint R & D efforts
- Segment partners: CaPlast, Elbtal Plastics, Riflex Film, now contec and Steinweg Kunststofffolien

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