

# VC999 BioPack Packaging System

Fully biodegradable, CO<sub>2</sub> neutral, energy saving

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VC999 BioPack is a brand new packaging system from VC999 Packaging Systems Ltd. which uses bioplastic packaging material. VC999 BioPack is fully biodegradable packaging made from renewable resources. In terms of biodegradability and compostability, the entire VC999 BioPack packaging system has DIN CERTCO certification (no. 7P-0199). The individual system parts are fully biodegradable, CO<sub>2</sub> neutral and produced with energy-saving technology. The new VC999 BioPack packaging system guarantees numerous new areas of application for environmentally-friendly modified atmosphere packaging (MAP) – especially for fresh food products.



## The system

The VC999 BioPack packaging system consists of the tray, the PLA (polylactic acid) lidding film, an absorbent pad and cellulose labels.

## VC999 BioPack tray

- The PLA tray is highly transparent and sturdy. The standard tray size is 187 x 137 mm and 25 or 50 mm deep.
- Application of the VC999 BioPack tray is the same as with common trays.
- The DIN CERTCO number and a compostability logo are embossed on the base of tray.

## VC999 BioPack lidding film

- The PLA lidding film is coated with a barrier of pure silicon oxide (SiO<sub>x</sub>). This natural quartz barrier prevents external contaminants from entering the packaging.
- VC999 BioPack can be used with unprinted lidding films or random printed lidding films (with the DIN CERTCO number and compostability logo).

- VC999 BioPack lidding films are printed with environmentally friendly, biodegradable ink.

## VC999 BioPack absorbent pads

- The VC999 BioPack system comes with absorbent pads. The pads are adhesive-free and consist of cellulose cotton coated with cellulose PLA.
- They are also fully biodegradable and can be disposed of together with the packaging.

## VC999 BioPack labels

The VC999 BioPack range also contains cellulose fiber labels without whitener, or printed PLA film labels.

## Application

The new VC999 BioPack system is suitable for all fresh MAP products: Fresh meat and cold cuts, poultry, fish, dairy products, fruit, salads and fresh vegetables, or even cheese and similar products. The appearance and shelf life of VC999 BioPack packaging is exactly the same as oil-based plastic packaging.

## Advantages

Compared to common packaging materials, the new VC999 BioPack packaging system offers numerous advantages:

- The entire packaging is made from renewable resources.
- The PLA packaging neither contains whiteners nor releases ink or adhesive substances which could contaminate the product; ensuring that organic products remain organic.
- The packaging is fully biodegradable within 47 days at suitable compost works. It decomposes into water, compost and CO<sub>2</sub>. Less CO<sub>2</sub> is released into the atmosphere during this process than was previously consumed by the plants used to produce the PLA.
- PLA can also be physically and chemically recycled and incinerated. During incineration less CO<sub>2</sub> is released into the atmosphere than was previously consumed by the plants.
- The favorable life cycle assessment and the reduction of greenhouse gases comply with current environmental regulations.

## Customer benefits

- VC999 BioPack is the first fully biodegradable packaging made from renewable resources which, thanks to the SiO<sub>x</sub> lidding film barrier, is suitable for storing fresh, refrigerated MAP products just as long as common polypropylene.

ylene packaging (PP) with an EVOH barrier (ethylene vinyl alcohol).

- VC999 BioPack is exempt from eco taxes; and «green dot» license fees are not applicable.
- Neither pollutants from the natural PLA packaging nor external contaminants can harm the packaged products.

#### Additional benefits

Beside the VC999 BioPack packaging system, VC999 Packaging Systems Ltd. offers numerous packaging machines and services.

- Profound process knowledge for the application of PLA packaging materials at VC999 tray sealing systems.
- Modified tray sealing systems for the application of PLA materials.
- Networks and partnerships with relevant companies that produce, process, and optimize PLA.
- Support for the implementation of PLA thanks to consultation with experts.
- Process consultancy via meetings with environmental and consumer associations.

#### Technical data VC999 BioPack

##### BioPack PLA-trays

size	187 x 137 mm
depth	25 / 50 mm
colour	highly transparent

##### BioPack PLA-lidding films

###### unprinted

width	various
<b>random print</b> DIN CERTCO no. and compostability logo	
width	260 / 520 mm

Other widths and prints are also available.

also available

**BioPack absorbent pads**, cellulose, 100 x 150 mm 2500 pcs/box

**BioPack labels** will be produced according to the customer's preference.

#### Bioplastics

Bioplastics is not a standardized polymer class but a family of products which can vary considerably.

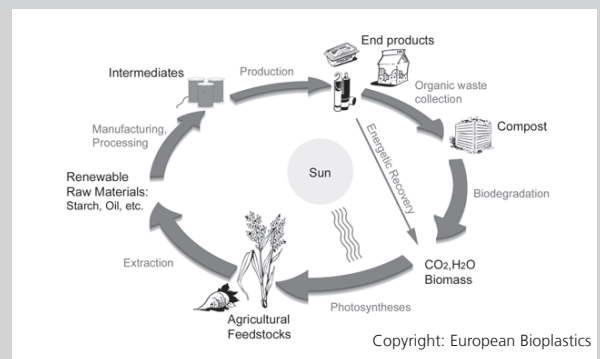
The term bioplastics refers to two specific classes:

- Plastics produced from renewable resources.
- Biodegradable plastics which satisfy all the criteria of acknowledged scientific standards as regards the biodegradability and compostability of plastics (plastic products).

In both cases, renewable resources are used to a large extent for thermoplastic polymer production.

Bioplastics can be either pure cellulose products; consisting of plant parts which are crushed and dissolved using acids and alkalines. The solution is then recombined as cellulose, cellulose film or cellophane and the relevant additives. However, bioplastics can also be made from natural products such as sugar, starch or protein. The basis is usually corn, rice, potatoes or cereal or milk derivatives (casein). The production of bioplastics is environmentally friendly. Furthermore, additional water is not required for washing or cleaning processes. The amount of energy required for the production of bioplastics is about 20% less than, e.g., for the production of polyester or polypropylene.

#### Closed loop life cycle of BPDs



#### Further information

[www.european-bioplastics.org](http://www.european-bioplastics.org)

[www.dincertco.de](http://www.dincertco.de)

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