

# FB124 - Bioplastic for Film Blowing



FB124 is a bioplastic based on PLA, suitable for use in a variety of film blowing applications. The formulation is based on a very high proportion of renewable raw materials, which allows for a reduction in carbon footprint by up to 49% compared to conventional fossil-based plastics.

### **Environmental Benefits**

FB124 has been developed to be a sustainable alternative to fossilbased plastic for film blowing. A high proportion of the raw material comes from renewable sources.

According to life cycle assessment calculations (LCA), FB124 has a global warming potential (GWP) of 1.80 kg CO2 eq./kg of manufactured material (cradle-to-gate) \*. This is lower than conventional plastic (see diagram below) and shows how switching to BIQ Materials FB124 noticeably reduces the CO2 footprint of your company's products. Our ambition is to continuously reduce the environmental footprint of our materials, with the goal of reducing GWP to 1.23 kg CO2 eq./kg of manufactured material by 2030.

Please contact us to discuss how you can improve the environmental profile of your products.

\* The CCaLC2 software, version 1.7, and its database were used to perform this life cycle analysis.







## **Global Warming Potential for FB124 Compared to Conventional Plastic**

## **Recyclable and Biodegradable**

FB124 is biodegradable but can also be recycled or incinerated, thus having many ways to complete the carbon cycle when its usage period is over. Through recycling, the carbon footprint can be further reduced. In this way, it is a good material choice for companies that want to mark their transition towards a circular economy with a reduced environmental footprint. Compared to conventional plastics, PLA breaks down as carbon dioxide and water over time in the environment. If it ends up in nature, it does not leave any permanent microplastics behind.



### **An Easy Transition**

FB124 stands out with very high impact resistance (falling dart) combined with good processability in the film blowing process. It can replace fossil-based plastic in many different tools and applications, which both simplifies and reduces the cost of transitioning to bioplastic. Please contact us, and we will help your company make the switch.



# Technical Data

The table below shows a selection of properties for FB124

| Parameter                            | Värde         | Enhet  | Metod      |
|--------------------------------------|---------------|--------|------------|
| Color                                | Easy to color | -      | -          |
| Density                              | 1,30          | Kg/dm³ | ISO 1183   |
| Melt Flow Index (190 °C; 2,16 kg)    | 2             | g/10   | ISO 1133   |
| Melting Temperature                  | 155           | °C     | Internal   |
| Falling Dart (film 40 micrometers)   | 428           | g      | ISO 7765 A |
| Proportion of Renewable Raw Material | 64-100*       | %      | Internal   |

\*Depending on quality. The remaining content consists of non-bio-based but biodegradable polymers and processing aids.