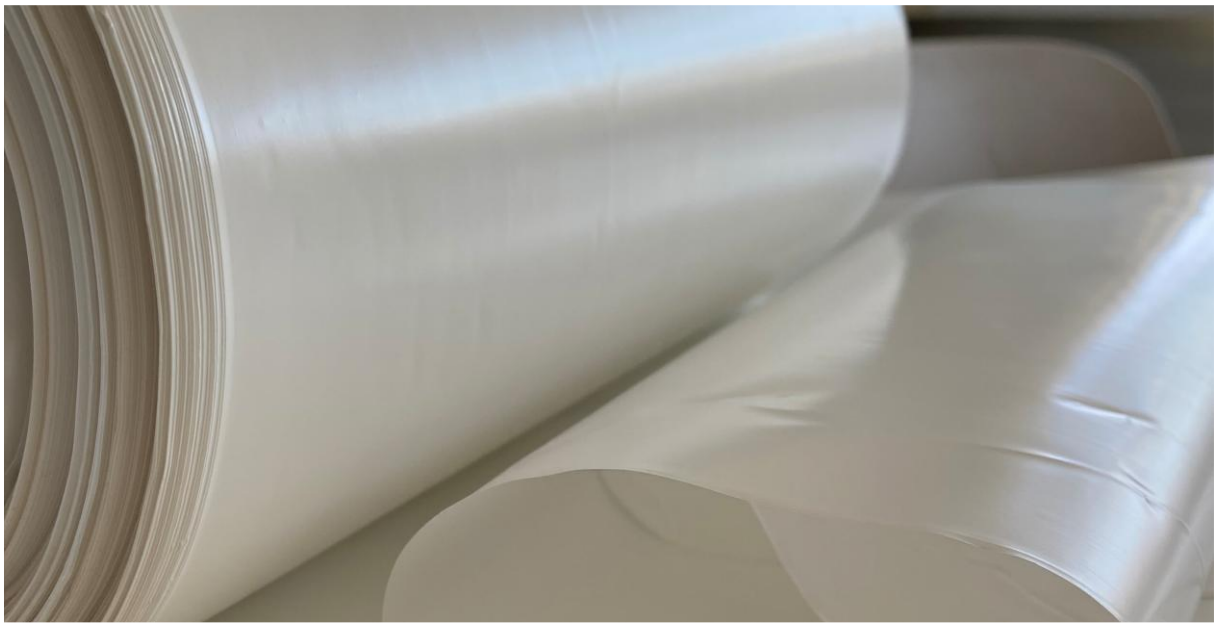
Changing plastic.
For good.

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.

- Up to 59% lower CO2 footprint
- Very high proportion of renewable content
- Recyclable
- Free from permanent microplastics
- Very high impact resistance of the film

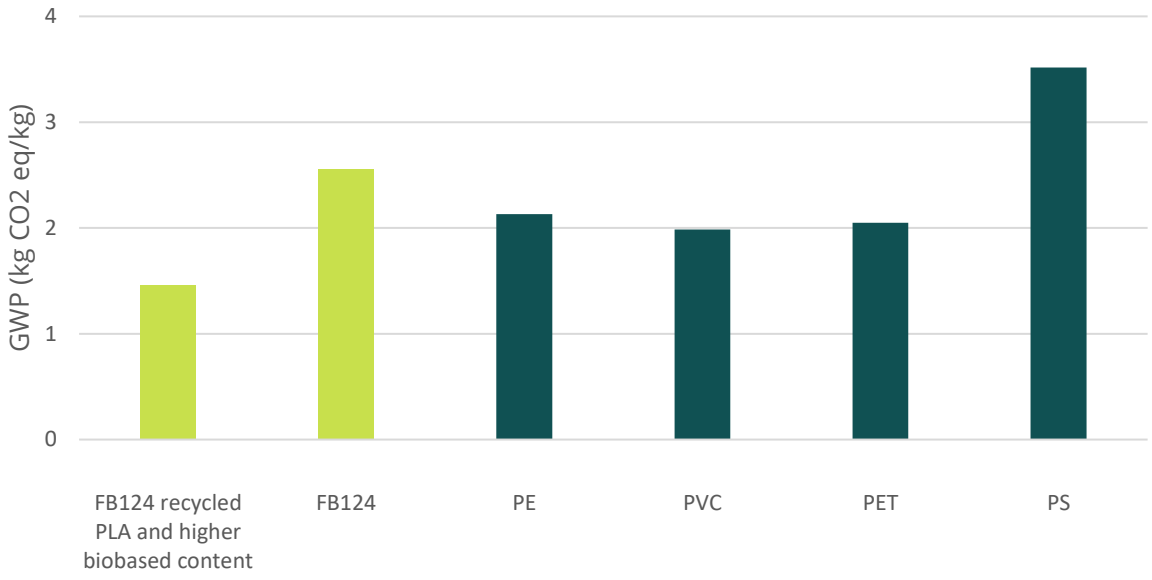
Environmental Benefits

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

According to life cycle assessment (LCA) calculations, FB124 has a global warming potential (GWP) of 1.46 kg CO2 eq./kg of manufactured material (including biogenic carbon, cradle-to-gate) * when recycled PLA and a higher proportion of bio-based ingredients are used. This is lower than for conventional plastics (see diagram below) and demonstrates how switching to BIQ Materials FB124 significantly reduces the CO2 footprint of your company's products. The GWP for FB124 without recycled PLA and with slightly lower renewable content is 2.56 kg CO2 eq./kg of manufactured material (including biogenic carbon).

* 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.