

# News Release

P148/24e  
April 26, 2024

## Industrial compostable biopolymer for greenhouse twines

- **Certified industrial compostable ecovio® T 2206 as ideal material for twines used to grow annual fruit and vegetables in greenhouses**
- **Industrial compostable ecovio® extends end-of-life of twines to organic recycling**

BASF expands its offering for sustainable food production: Its certified compostable biopolymer ecovio® can now also be used to manufacture black twines used to grow annual fruit and vegetables in commercial greenhouses. The grade ecovio® T 2206 is certified industrial compostable according to EN13432. This means that after harvesting the twines can be collected together with the plant residues and transported to industrial composting facilities (depending on local regulations) where they biodegrade. With this new end-of-life option for twines, persistent microplastics in organic waste can be avoided while at the same time more green waste can be turned into valuable compost. The industrial compostable ecovio® thus supports organic recycling and helps to close the nutrient loop to achieve a circular economy.

Twines made of ecovio® T 2206 can be used to help creepers like tomatoes and cucumbers to climb upwards in greenhouse structures in many climates from Europe, South America to Asia and Canada: Tests show the twines' excellent performance until the end of the crop cycle. After harvesting farmers do not have to laboriously separate the twines from the plants but simply collect them together for composting. The certified industrial compostable twines do not only show benefits

for farmers but also for manufacturers: ecovio® T 2206 can be produced on standard polypropylene (PP) machinery for twines.

### **More BASF biopolymers for agricultural applications**

BASF's biopolymers portfolio for sustainable agriculture and food production also includes the certified soil-biodegradable grade ecovio® M 2351 (according to EN 17033). It was especially developed for mulch films used in agriculture and horticulture to increase the yield, speed up harvesting as well as to save water and herbicides. Mulch films made of ecovio® M 2351 are completely and biologically degraded by microorganisms like bacteria and fungi that exist naturally in the soil. Farmers can simply plough the mulch films made of ecovio® M 2351 back into the ground after harvest. This saves time and money - and it helps to avoid persistent microplastics in agricultural soil which would occur, if farmers used conventional mulch films made of non-biodegradable polyethylene (PE).

### **BASF's biopolymers enable organics recycling**

BASF's biopolymer ecovio® is certified compostable in accordance with standards such as EN13432. It is a blend of BASF's PBAT ecoflex® and renewable raw materials. Typical applications for ecovio® are organic waste bags, cling film, fruit and vegetable bags, as well as agricultural mulch films and food packaging applications. Studies show the advantages of ecovio® for production, packaging and shelf life of food as well as for the collection of food waste. These advantages are based on the material's certified biodegradability in industrial and home composting as well as in agricultural soil: Food waste is reduced, nutrients are returned to the soil by means of greater volumes of compost – and the accumulation of persistent microplastics in agricultural soil is avoided. This contributes to a circular economy by closing the nutrient cycle via organics recycling.

Further information: [www.ecovio.basf.com](http://www.ecovio.basf.com) and [www.biopolymers.basf.com](http://www.biopolymers.basf.com)

### **About BASF's Performance Materials division**

BASF's Performance Materials division is at the forefront of the much-needed sustainability transformation in plastics. Our products are co-created with customers around the globe to bring innovations to major industry sectors such as transportation, consumer goods, industrial applications,

and construction. Our R&D focuses on all stages of the plastics journey: Make, Use and Recycle. The MAKE phase is about improving how plastics are made, from product design to the choice of raw materials and the manufacturing process itself. The USE phase enhances plastics' strengths such as light weight, robustness, and thermal resistance. At the end of the product lifecycle, the RECYCLE phase looks at how to close the loop to achieve a circular economy. In 2023, the Performance Materials division achieved global sales of €7.2 billion. Join #ourplasticsjourney at: <https://www.performance-materials.basf.com>

### **About BASF**

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. Around 112,000 employees in the BASF Group contribute to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio comprises six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions. BASF generated sales of €68.9 billion in 2023. BASF shares are traded on the stock exchange in Frankfurt (BAS) and as American Depositary Receipts (BASFY) in the United States. Further information at [www.basf.com](http://www.basf.com).