The original since 1998.

Certified compostable polymer.

Pure chemistry.

ecoflex® in the web: www.plasticsportal.eu/ecoflex
Compared to conventional plastics, ecoflex® offers a decisive benefit: certified compostability. ecoflex® is an innovative pioneer in the field of biodegradable polymers, being an important raw material for many compostable and biobased plastics.

**ecoflex® is:**
- the ideal blend component for bioplastics
- certified compostable
- elastic as well as water and tear-resistant
- processable on conventional blown film plants (for polyethylene)
- printable and weldable
- suitable for food contact

**ecoflex® – the optimal compound partner**
ecoflex® is an ideal blend component for the production of plastics from renewable raw materials making many final applications actually possible in the first place. This way ecoflex® provides the biobased and compostable BASF polymer ecovio® with special product properties such as flexibility and toughness.

Next to polylactic acid (PLA), other compound partners such as starch can be used in order to achieve a specific characteristics profile for the final application. A high content of ecoflex® is particularly suited for the production of flexible film products in the packaging area. Mechanical characteristics, such as stiffness or puncture resistance, can be varied and specifically adjusted.

**ecoflex® IS THE FIRST COMPOSTABLE POLYMER OF BASF ON A FOSSIL BASIS AND IS ON THE MARKET FOR MORE THAN A DECADE.**

Original

The certified compostable polymer ecoflex®
THANKS TO A SPECIAL CHEMICAL STRUCTURE, ecoflex® CAN BE BIODEGRADED BY MICROORGANISMS AND THEIR CORRESPONDING ENZYMES.

Under the circumstances given in an industrial composting plant, the ecoflex® molecules are biodegraded within a few weeks.

In the course of special certification procedures, independent institutes verify the suitability of bioplastics in terms of biodegradability, compostability, compost quality, and plant compatibility.

ecoflex® offers various product grades that meet the following, international and national standards and regulations for industrial composting, among others:

- European standard EN 13432
- Australian standard AS 4736
- American standard ASTM 6400
- Japanese standard GreenPla

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You can rely on ecoflex® guarantees verified quality. Its ecological properties have been investigated in extensive examinations.

Scientifically recognized tests (plant growth test, Daphnia test, toxicological tests according to OECD directives) have proven in practice that ecoflex® has no negative consequences for nature or the environment. Furthermore, ecoflex® is in its composition one of the few compostable polymers complying with the requirements of the European food contact regulation¹ as well as the requirements of the US Food Contact Substance Notification².

¹ Commission Regulation (EU) No. 10/2011 of January 14, 2011 on materials and objects of plastic, designed to be in contact with food
² According to Food Contact Substance Notification No. 907 of FDA
The plant growth test

The plant compatibility in the barley test is a key parameter for compost quality. This test looks at the effect of the test substance on the growth of summer barley. The following samples are prepared and used for testing:

- A compost is recognized as plant-compatible, if in a mixture of 25 % compost with 75 % reference soil a 90 % barley yield is achieved. In both variants, the test with ecoflex® shows no negative consequences on the barley yield.

The Daphnia test

In this test, the pollutant-dependent immobilization of the Daphnia in solutions of different concentrations (series of dilutions) is used. Testing was carried out in accordance with DIN 38412 Part 30.

The control solution contains microorganisms that biodegrade ecoflex® enzymatically.

The stock solution to be tested also contains the degradation intermediates of ecoflex®. It is diluted step by step and for each concentration stage ten Daphnia are placed in the test solution (20 °C, pH 7.0 ± 0.2). After 24 hours, the number of Daphnia still swimming is counted. Even with a low dilution, as in the control solution there are still at least nine Daphnia swimming. The test is therefore passed.
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