

For sustainable cultivation of rice:

Mulch films made of ecovio® M 2351

BASF offers the certified soil-biodegradable ecovio® M 2351 for mulch films with an excellent agronomic performance for cultivating rice. Mulch films made of ecovio® M 2351 can remain in the field and should be incorporated into the soil as soon as possible after harvest: Farmers do not have to remove them and organize the recycling. Naturally occurring soil microbes like bacteria or fungi recognize the structure of the film as food they can metabolize. The biodegradation process generates CO₂, water and biomass of the naturally occurring microbes.

Tailor-made material:

- Certified soil-biodegradable according to EN 17033 and ISO 23517
- Recommended thickness 8 to 10 µm depending on the location
- Recommended color: black
- We recommend to add 12 % of BASF masterbatch black, which corresponds to 4 % carbon black
- Detailed research about the bio-degradation process available
- ecovio® M 2351 does not contribute to persistent microplastics in the soil

Very good performance in the field – key advantages compared to bare soil:

- Higher soil temperature and thus earlier development of transplanted rice seedlings
- Water, herbicide or hand weeding savings
- Higher yield
- Especially recommended for high price varieties

Easily adaptable to flooded rice production – suggested usage:

- Can be laid out with adapted transplanter
- Transplanting with less water than usual, less water needed during growing season
- Mechanical transplanting possible
- Manual or mechanical harvest possible
- Mulch film should be incorporated into the soil immediately after harvest to complete the soil-biodegradation process
- Can be applied in all regions
- Particularly interesting for organic and or high quality rice segment in all regions

Sustainability benefits:

- Contribution to microplastics prevention: soil-biodegradable mulch films made of ecovio® prevent persistent microplastics in soil often caused by thin conventional mulch films made of polyethylene (PE), which cannot be fully recollected and recycled.
- Maintaining yield stability and health of agricultural land: extensive internal and external studies have shown the mechanisms of soil-biodegradation of mulch films made of ecovio® M 2351 as well as also identified and analyzed the responsible microbes that are present in agricultural soils and driving the biological degradation process.



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Note

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