

Bio360 / SG-78 and SGX-78 series Biodegradable Mulch Film



User's Guide

Bio360 Biodegradable Mulch Film requires a particular approach and a special attention compared to traditional plastic films. Follow the recommendations listed below to help optimize the performance of the film.

Film Selection

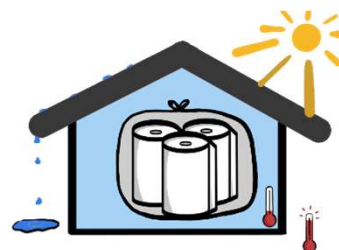
- 0.7 mil or higher thickness is recommended for eastern regions located south of North-Carolina. However, experience shows that the film can keep its integrity on soil for at least 2 months at a 0.6 mil thickness.
- The lifespan of the film depends on the thickness, the specific usage conditions, combining the effects of environmental factors such as **microorganisms'** activity in the soil, **temperature, water, sunlight, agrochemicals** as well as the handling and laying conditions.



- PolyExpert cannot be responsible for any loss related to the usage and speed of degradation of this film. It is the user's responsibility to make trials and tests prior to usage, in order to validate the film's behavior in specific usage conditions.
- It is recommended to conduct specific crop tests in the area where the use of the film is intended, before generalizing its use to make sure that it meets the expectations.

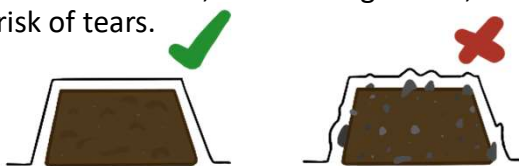
Film Storage

- Film rolls should always be stored in their original packing and protected from **direct light, heat and moisture**, or any other factor that might alter the mechanical properties of the film or its degradation process.



Soil Preparation

- The correct preparation of the soil assures a good film performance. The soil intended to be covered with the film must be loose and refined, without large rocks, lumps, or sharp/edgy objects, to prevent the risk of tears.

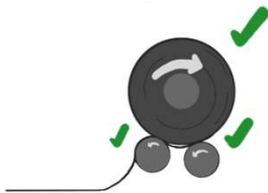
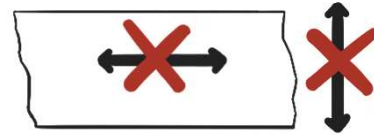


Laying of the film

- Traditional laying equipment may be used to lay mulch film, *but it is necessary to reduce both the tension of the film and the tractor speed*, to less than what is usually set for standard polyethylene mulch film. **It is strongly recommended to avoid overstretching the film by using applicators with worn out bushings, rotators / idlers / rolls.**



Too much tension will lead to the stretching of the film and will cause premature degradation.



- The machine rolls have to be completely free-flowing.

- The press wheels should not be tilted (as for standard mulch films) and should run on the land, not the bed.



- Avoid laying on wet soil as this may cause the press wheels to sink. The press wheels would then overstretch the film sideways which may lead to premature tearing.
- The mulch film must be properly tucked to avoid any wind damage.
- Do not lay the film immediately after bed top organic fertilization. It could affect the biodegradation due to the high content of microorganisms in organic fertilizer.

Planting

- Planting should occur shortly after laying the mulch film, preferably **when the film hugs the contour** of the bed well; a film that floats in the wind could break the seedlings. Biodegradation begins when the film is laid. It will be first visible at the interface with the soil, around the edges.



Irrigation

- It is very important to avoid pooling in the fields: Rain or flooding irrigation may accelerate film degradation, mainly on the sides of the beds where the film meets the soil, and beneath.
- There is no restriction concerning the use of drip tape. However, it should be buried at least one inch deep to avoid direct contact with the film, which could ultimately cause tearing.

Disclaimer

Due to the many different external factors that can influence the biodegradable film performance, which are beyond the manufacturer's control, PolyExpert cannot guarantee that said performance will exactly meet the customer's expectations.