



User Instructions

Can-Eco Mulch Films

Can-Eco provides protection against weeds and supports ideal microclimates for the growth of crops when applied properly. Furthermore, it can be metabolized by microorganisms, such as bacteria or fungi, over a 'reasonable' period of time in compost or in soil.

WARNING: Prior to cultivation of **Can-Eco** into the soil verify compliance with USDA organic regulations for the use of biodegradable biobased mulch films in organic crop production (79 FR 58655) with your certifying agent.

STORAGE: Product rolls should always be stored in the original packaging, in a horizontal position, on a smooth surface, not stacked, and away from moisture, direct light and heat sources in order to avoid crushing and deformations. It is recommended to remove damaged film segments before use.

WARNING: Accidental tears or deformations, due to improper storage, handling or transportation will impact the laying and accelerate biodegradation of **Can-Eco** in the field.

SOIL PREPARATION: For optimum results the soil must be loose and friable prior to laying of the mulch; stones, clods, undecomposed plant residues, and other objects that can puncture the mulch should be removed. The beds should be firm and well-formed (higher in the center) to allow for installation of the mulch without pockets or depressions, allowing water to run-off quickly.

WARNING: Water puddles on the film will accelerate biodegradation on the soil.

MULCH LAYING: **Can-Eco** can be laid using conventional plastic mulch laying equipment; however tension needs to be adjusted properly to reduce the likelihood of tearing. It is recommended to bury the irrigation tape in the soil, because irrigation tapes placed directly underneath plastic mulch can cause abrasion and tearing.

The mulch must be laid in continuous and tight contact with the soil and its edges secured with a generous amount of soil to avoid "whipping" in the wind. Whipping can cause tearing of the mulch and "guillotine" transplants.

WARNING: Do not lay **Can-Eco** mulch on excessively dry or wet soil or immediately after organic fertilization to prevent accelerated biodegradation!

PLANTING HOLES: It is advisable to use sharp tools and to make the smallest seedling holes required with neat, clean edges to maximize soil coverage. Seedlings should be transplanted immediately following perforation.

WARNING: Dull tools increase the likelihood of tearing and jagged holes accelerate biodegradation on soil.

SERVICE LIFE: The integrity of **Can-Eco** mulch on the soil depends on its thickness and the interaction of a range of physical and environmental factors present in the field that include soil





User Instructions

Can-Eco Mulch Films

moisture, heat, microbial activity and agrochemicals used.

Experience shows that **Can-Eco** films of 0.5 mil thicknesses will keep their structural integrity on the soil for a period ranging from 1 to 2 months, 0.6 mil thicknesses from 2 to 4 months and 0.8 mil thicknesses from 4 to 6 months.

Consequently, **Can-Eco** film thickness should not only be selected accordingly to the length of the growing cycle of the crop to be transplanted, but also on the climatic conditions at the growing location. Any biodegradable plastic mulch, including **Can-Eco**, of a given thickness will last longer on soil in a temperate climate, like Michigan than in a humid subtropical climate, like Florida. Therefore, it is advisable to add 0.1 mil for warmer and humid climates.

Crops grown on **Can-Eco** can be treated with approved pest control and nutritional products when used according to label rates.

WARNING: Strong acid or alkaline pesticide formulations, certain adjuvants and heavy metals containing micronutrient fertilizers can reduce the service life of **Can-Eco** on the soil and moreover slow down biodegradation in compost or soil.

POST-HARVEST: Residual **Can-Eco** can be safely composted in a municipal/commercial compost facility or cultivated into the soil together with the crop residues after removal of any other non-biodegradable materials used like plastic drip tape.

While a range of cultivation methods can be used, the best results will be obtained using equipment that shreds **Can-Eco** into small pieces and incorporates these into the soil. This ensures fewer larger fragments, which are digested slower by microorganisms and therefore can resurface during subsequent cultivations.

WARNING: **Can-Eco** mulch film left on the soil for biodegradation will be dispersed in part by wind.

BIODEGRADATION RATE:

Biodegradation commences when **Can-Eco** mulch is laid on soil, starting with the edges and around planting holes.

As a general rule, aerobic microbial digestion in compost, under warm, moist conditions and high microbial populations is much faster than anaerobic microbial digestion in soil. Rule of thumb: A **Can-Eco** mulch's anaerobic digestion in the soil will take at least as long as its service life on the soil.

Once plowed under the soil, **Can-Eco** biodegrades into carbon dioxide, water, and biomass. In the case of **metalized Can-Eco**, the film also produces aluminum minerals naturally present as a major constituent in all soils.

WARNING: Anaerobic microbial digestion of **Can-Eco** mulch in the soil, even at the same thickness, will vary from site to site because of slight variations in soil and weather conditions and changes from year to year. The use of fertilizers can



User Instructions

Can-Eco Mulch Films

accelerate biodegradation rates, while the use of conventional, organic or bio pesticides can decelerate it..

