

LETTER OF OPINION

Home compostability and soil biodegradability of GreenFill from Senbis Polymer Innovations B.V.

In March 2020, OWS started a testing program on home compostability and soil biodegradability of GreenFill produced by Senbis Polymer Innovations B.V., Eerste Bokslootweg 17, 7821 AT Emmen, The Netherlands. The purpose of the testing program is to verify whether GreenFill is home compostable and biodegradable in soil and complies with the certification schemes OK compost HOME and OK biodegradable SOIL from TÜV AUSTRIA Belgium.

Looking at the composition of GreenFill, it can be stated that more than 99% of GreenFill is composed of certified home compostable polymers with the remaining being inorganic material. In other words, based on the composition of GreenFill, it can be concluded that GreenFill fulfills the biodegradation requirement of the OK compost HOME certification scheme and can be called biodegradable under home composting conditions. To allow for OK compost HOME certification, heavy metals and Fluorine analyses will be performed as well as disintegration testing to confirm that the rugby shaped GreenFill granules disintegrate sufficiently under home composting conditions within the maximum allowed timeframe of 26 weeks.

The home composting environment is, from a biological point of view, comparable to soil. Similar bacteria and fungi are active, yet a somewhat lower biological activity is found in soil. Because of that, it can be assumed that materials that biodegrade under home composting conditions will also biodegrade in soil, be it at a lower rate. OWS will run a soil biodegradation test on GreenFill to confirm the inherent nature of GreenFill to biodegrade in soil and to evaluate the time needed to reach complete biodegradation. To allow for OK biodegradable SOIL certification, complete biodegradation needs to be reached within maximum 24 months.

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