

22 July 2024

To Whom It May Concern

Subject: PolBionix Home Composting Biodegradation Certification

Scion is a Crown Research Institute (CRI) mandated by the New Zealand Government “To drive innovation and growth from New Zealand’s forestry, wood product and wood-derived materials and other biomaterial sectors, to create economic value and contribute to beneficial environmental outcomes for New Zealand”.

Scion is able to design, manufacture, and test compostable products and materials is crucial for the success and future growth of New Zealand’s packaging and plastics-related businesses. Scion can measure the compostability of a range of different materials under varying conditions including industrial composting and home composting. Scion’s biodegradation facility measures the compostability of materials according to international standards.

Testing is undertaken in accordance with internationally recognised standards and Scion is the only DIN-CERTCO-accredited testing facility in Australasia. DIN-CERTCO confirms that our compostability testing is meeting specified requirements including those for quality, safety, efficiency and reliability.

To be certified as compostable, materials have to pass a range of different tests:

1. chemical characterisation
2. biodegradation
3. disintegration
4. ecotoxicity of generated compost.

Scion has undertaken the home biodegradation testing of PolBionix formulations.

- In October 2022 Aerobic biodegradation testing under home composting conditions was undertaken on the PolBionix formulation according to ISO standard 14855-1 (2017) and AS 5810 (2010).
 - Biodegradation Report 2105-BD showed that the PolBionix formulation achieved more than 90% relative biodegradability after incubation at 25°C for 365 days and therefore passed the biodegradability criteria.
- In August 2023 Aerobic biodegradation testing under home composting conditions was undertaken on a further PolBionix formulation according to standards ISO 14855-1 (2017) and AS 5810 (2010).
 - Biodegradation Report 2202-BD showed that the additional PolBionix formulation composite test material achieved more than 90% relative biodegradability after incubation at 25°C for 365 days and therefore passed the biodegradability criteria.

In summary, the PolBionix formulations meet the international home composting conditions according to ISO standard 14855-1 (2017) and AS 5810 (2010) for Biodegradation.

Signed



Alec Foster
Portfolio Leader – Bioproducts and Packaging