

Fact Sheet

Oxo-degradable, oxo-biodegradable, photo-degradable, photo-fragmentable, enzyme mediated or landfill biodegradable plastics

The Australasian Bioplastics Association (ABA) is the peak body for the bioplastics industry in Australia and New Zealand. The ABA collaborated with the Australian Packaging Covenant Organisation (APCO), and the Australian Organics Recycling Industry (AORA) to develop and launch Compostable Packaging Guidelines with emphasis on material selection.

During development and following publication of the Guidelines, inquiries from the public and industry require a response to claims made by suppliers and proponents of the above referenced materials. This fact sheet is intended to cover all such products with these claims, which are predominantly, but not exclusively, items such as single use plastic bags.

- Finished products with claims that the product contains or is oxo-degradable, oxo-biodegradable, photo-degradable, photo-fragmentable, enzyme mediated or landfill biodegradable, are generally, synonyms for the same type of products.
- They are conventional non-biodegradable plastics (usually polyethylene (PE) or polypropylene (PP), that have additives incorporated at low rates (2-3%) to cause the product to fragment or disintegrate under some conditions, such as in sunlight or in the presence of oxygen or in an anaerobic environment.
- This disintegration is **accelerated fragmentation** into smaller and smaller pieces which contributes to microplastic fragments which may in turn be lost to the surrounding environment.
- None of these conventional non-biodegradable products meet the requirements of internationally recognised and consistent Performance Standards covering compostability and biodegradability, including Australian Standards AS4736 -2006 – Biodegradable plastics suitable for composting and other microbial treatment and AS5810 -2010 – Biodegradable Plastics Suitable for Home Composting.
- These conventional non-biodegradable products cannot be certified compostable to any Performance Standards. They should not be used to collect or to dispose of food or other organic waste in systems such as a kerbside Food and Garden Organics (FOGO) collection or home composting.
- Biodegradation can only be proven if a product has been certified compostable to Performance Standards such as AS 4736 or AS 5810, where in the presence of microorganisms, **certified compostable** products are consumed by these microorganisms, leaving no residues or toxic outcome.
- Certified compostable products do not contribute to microplastics as they are fully assimilated by the microorganisms. Certification of a product confirms this biological outcome.
- When disposing of food or other organic waste, use **only certified compostable bags or products** which can be easily identified by the **looped seedling** and **home compostable** logos.



The ABA therefore welcomes a ban or phase out of these products in the most comprehensive manner available. Further information is available from the Association at www.bioplastics.org.au or by contacting the Association.

AORA is the peak industry body for the recycled organics industry. AORA Members recycled over 7.5 million tonnes of organic material in 2018-2019 and has developed a Joint Position Paper with the ABA on the suitability of only certified compostable products for organics recycling in Australia and New Zealand.