



OxoPak Certified Trade Mark Application Nos. 1852562

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Executive Summary

The Australasian Bioplastics Association (ABA) is the peak Industry body for manufacturers, converters and distributors of bioplastic products and materials throughout Australia and New Zealand. The Association represents Members in the promotion of and advocacy for, Member's products and materials. The association works with government, composters, industry groups, NGOs, brand owners and plastic converters to further the understanding and appropriate use of bioplastics.

Members of the ABA are small to medium Australian and New Zealand owned businesses, together with subsidiaries of the world's largest companies, thus the membership is balanced between interested parties with significant experience in bioplastics, whether certified compostable and therefore fully biodegradable, or biobased materials, or both.

Additionally, the ABA maintains working relationships with domestic Australian and overseas entities such as the Australian Organics Recycling Association, European Bioplastics, Biodegradable Products Institute (BPI North America), DIN CERTCO (Germany), and Industry Associations throughout Asia, such as the Pan Pacific Bioplastics Alliance, which incorporates Industry Associations based in Japan, Thailand, China, Korea and Taiwan.

The ABA also operates as the Executive Secretary for the Pan Pacific Bioplastics Alliance, which incorporates all global entities involved in research and development, sales and marketing and consultation on the appropriate use of bioplastics in applications such as flexible films, packaging and agricultural films and wraps, replacing conventional non-recyclable polyethylene.

Verification as Certified Compostable and therefore fully biodegradable in commercial or home composting environments

The ABA administers a voluntary verification scheme, for companies or individuals wishing to have their claims of compliance with the "commercial composting" Australian Standard AS 4736-2006, Compostable and biodegradable plastics - "Biodegradable plastics suitable for composting and other microbial treatment" (Australian Standard AS 4736-2006) verified.

The ABA also administers a voluntary verification scheme for companies wishing to verify compliance with the Home Composting standard, AS 5810-2010, "Biodegradable plastics suitable for home composting" (Australian Standard AS 5810-2010).

These two verification schemes are important as they are currently the only verification programs available in Australia and New Zealand, to support verification of claims for compliance to these two Australian Standards. The programs are mirrored globally with almost equivalent Standards for these end of life environments, industrial composting and home composting.

Circular Economy

The ABA supports and is signatory to the New Plastics Economy initiatives developed by the Ellen MacArthur Foundation(1). The initiative is widely supported by industry and governments in many jurisdictions. Compostable plastics help facilitate the recycling of organic waste with microorganisms through composting and other microbial treatment, diverting many thousands of tonnes from landfill to the soil. The circular economy principles require plastics use to be reduced where possible and to be reused and ultimately recycled. Bioplastics can be recycled using microbial treatment and conventional mechanical plastics recycling technologies.

Response to OxoPak Trade Mark Application No. 1852562

The ABA believes that consumers will be misled by the proposed CTM and related claims. The ABA's concerns are several as summarised immediately below. Substantiation of these concerns follow.

1. The technology used for the products is claimed to provide environmental advantages whereas none are provided.
2. The ABA endorses and supports the Circular Economy initiatives instigated by the Ellen MacArthur Foundation(1) and which have been widely adopted by governments, industry and commerce. Plastics products should be reduced, reused and recycled. The products discussed do not support circular economy initiatives, rather work contrary to them.
3. The technology enables disintegration and fragmentation of a plastic item under some conditions. No time frame for disintegration is stated or qualified.
4. Resultant fragments are claimed to biodegrade in various conditions. No time frame for biodegradation is stated or qualified.

5. Plastic fragments are a pollutant in the terrestrial and marine environments which are being addressed with multinational strategies. The technology produces precisely the fragments that all efforts are being made to reduce.
6. Products made using the technology compromise recycling, a key plank of the circular economy. If they enter the plastics mechanical recycling stream they introduce additives which contaminate and potentially destabilise the recycle feedstock, reducing value and utility.
7. The European Parliament's environment committee endorsed on January 18th 2019 a political agreement reached in December 2018 on a directive to reduce pollution from the most littered throwaway plastic items, including bans on the production and import of oxo-degradable plastics. This is part of the worldwide initiative to control the amount of plastics particles and microplastics which enter the environment. Products made using the technology described in ATM Application 1852562 are oxo-degradable plastics albeit enzyme mediated.
8. The attached Statement from the European Commission, dated March 27th, 2019, updates the previous political agreement on single use plastics and specifically adopts rules on single use plastics, as part of the EU Plastics Strategy. This is an essential element of the Circular Economy Action Plan, which is similar to the direction Australia and other countries will head to in the future. The Single Use Plastics Directive inter alia, includes measure for "a ban on selected single-use products made of plastic, for which alternatives exist on the market: ...and on all products made of oxo-degradable plastic.
9. The Ellen MacArthur Foundation in its New Plastics Economy document OXO-DEGRADABLE PLASTIC PACKAGING IS NOT A SOLUTION TO PLASTIC POLLUTION, AND DOES NOT FIT IN A CIRCULAR ECONOMY states "Oxo- degradable plastics and similar materials are marketed and referred to in different ways, including so-called oxo-biodegradable, photo/thermo-degradable, oxo-fragmentable or pro-oxidant additive containing plastics - a terminology prone to confuse consumers, policymakers and companies"
10. Furthermore, the Ellen MacArthur Foundation document states as follows .
 "However, a significant body of evidence indicates that oxo-degradable plastics simply fragment into small pieces, including microplastics, with the entire process of biodegradation into naturally occurring molecules requiring timescales often (far) in excess of those claimed by their manufacturers. The contribution of these plastics to microplastic pollution poses an environmental risk, particularly in the ocean. Furthermore, oxo-degradable plastics are not suited for effective long-term reuse, recycling at scale or composting. In summary, the evidence to date suggests oxo-degradable plastic packaging goes against two core principles of the circular economy: designing out waste and pollution; and keeping products and materials in high-value use. Therefore, we support applying the precautionary principle by banning oxo-degradable plastic packaging from the market. Similarly, existing evidence suggests this conclusion also holds for other plastic packaging that contains similar chemical additives, both organic and inorganic, for which claims of accelerated biodegradation are made, including enzyme-mediated degradable plastics."

Trade mark CTM 1852562

PlanetOxoPositive – Certified Oxo-Biodegradable Plastic

- PlanetOxoPositive suggests the product provides positive advantages, the connotation of which is to improve the well-being of the planet. So called oxo-biodegradable plastics provide no environmental benefits.
- The circular design suggests a circular economy or resource reuse property.
- So called oxo-biodegradable plastics are designed to fragment under some conditions rendering recycling impossible.
- The creation of small fragments of plastic which will persist in the environment for many years cannot be considered “planet positive”

Certification Rules for Planet OxoPositive Logo - Introduction

- *The Planet Positive Logo is intended to be used to promote plastic products that are recyclable but which are also oxo-biodegradable if they do end up in the environment as litter.*
 - More broadly known as fragmentable plastics, products made using the technology compromise recycling, a key plank of the circular economy. If they enter the plastics mechanical recycling stream they introduce additives which contaminate and potentially destabilise the recycle feedstock, reducing value and utility.
- Degradation by oxidation.
 - No details is provided about the extent of degradation and time taken, no reference to a performance standards. ASTM D6954 as described is a comparison guide, not a performance or standard specification. No explanation of the benefits, if any, of degradation by oxidation.
- Biodegradation
 - Almost all organic materials are biodegradable. The important considerations are conditions under which this will occur, extent, time taken and residue. These can be proven by certification to Australian Standards AS4736-2006 and AS5810 – 2010. No certification is provided.
- ASTM D6954
 - ASTM D6594 is a guide for comparing the performance of two or more materials under the same series of tests. The results obtained are comparative only.
 - Clause 5.2
 - 5.2 The correlation of results from this guide to actual disposal environments (for example, agricultural mulch films, composting, or landfill applications) has not been determined, and as such, the results should be used only for comparative and ranking purposes
 - Clause 5.3

- The results of laboratory exposure cannot be directly extrapolated to estimate absolute rate of deterioration by the environment because the acceleration factor is material dependent and can be significantly different for each material and for different formulations of the same material. However, exposure of a similar material of known outdoor performance, a control, at the same time as the test specimens allows comparison of the durability relative to that of the control under the test conditions
 - BS8472:2011
 - BS8472 is a standard method of test and is not a specification. This means that merely the rules for performing a laboratory test are defined, there are no pass or fail criteria for what is an acceptable level of degradation. Consequently, it is not possible to claim conformity of a given material or product with this standard and it is misleading to describe sampled plastic that has undergone one or more of the tests as 'biodegradable'.

2. Proprietorship

- *//for the sake of preservation of the environment, preservation of the health of human consumers and of animals.*
 - No substantiation is provided for these claimed advantages.

4. Certified Characteristics

- *Authorised laboratory*
 - Not defined – what is an authorised laboratory?
- **(a)** *//in accordance with the manufacturer’s recommendations will meet ASTM D6954 and BS8472:2011.*
 - As noted elsewhere, there are no requirements to meet in ASTM D6494 or BS8472:2011. They are guides for comparing performance

5. Authorised Use of the Certification Mark

- *(c) The certification Mark does not mean that the product is environmentally friendly// must state that the Goods bearing the Certification Mark are certified as “environmentally preferable”.*
 - These are contradictory claims and misleading. A reasonable consumer would consider “environmentally friendly” and “environmentally preferable” as the same

6. Requirements to obtain an OxoPak certificate

- *(A) ///does not contain heavy metals or other substances of concern.*

- No detail of what heavy metals, permissible levels (zero is impossible) or test method
- No definition of *substances of concern*, permissible levels or test method
- (C) *The degraded residue of abiotic degradation undergo biodegradation*
 - No extent of biodegradation is stipulated. Is 1% acceptable or 100%. Neither ASTM D6954 nor BS8472:2011 address this.
- (D) *The substrate and products of the biodegradation test (soi or compost and plastic degradation and biodegradation residues) demonstrate no significant ecotoxicological effect*
 - No test method or standard specification or performance standard stipulated
 - *No significant ecotoxicological effect is a meaningless statement unless defined by test method and standard specification.*

Appendix A

- Planet OxoPositive Logo
 - OxoPositive infers an environmental advantage. There is none and no justification for a contrary claim is provided.

Oxo-Biodegradable technology.

The Australasian Bioplastics Association (ABA) refers to the following executive summary and study (attached).

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Executive Summary(3)

Benefits and Challenges of Bio and Oxo degradable Plastics
A Comparative Literature Study
Study DSL-1

Final Report

Benefits and Challenges of Bio and Oxo degradable Plastics(4)
A Comparative Literature Study
Study DSL-1

Executive Summary Final Conclusion (page 8)

2. Oxo degradable plastics

- Oxo-degradable plastics do not meet the requirements of industrial and/or home compostability set out in different standards (Oxo-biodegradable Plastics Association states that they are not marketed for composting);

- Conventional plastics additivated with transition metal salts;
- Since 2009 strong increase in number of standards and guides, although no consistency in content and pass levels (if available);
- (Bio)degradation claimed to be initiated by oxygen (but inhibited by moisture) and accelerated by UV light and/or heat;
- Very few positive biodegradation results obtained (those could not be repeated under the same conditions, not by the same author, not by other authors);
- No proof of Arrhenius' time-temperature superposition principle at wide range of temperature, which makes extrapolation from abiotic degradation at elevated temperature to real-life conditions scientifically incorrect;
- Alternative methods (carbonyl index, molecular weight, microbial growth, ADP/ATP,...) no proof of complete biodegradation, only proof of biological activity;
- Not compostable: better term 'thermo or photo-fragmentable plastics'?

Different certification institutes, but not always independent or transparent

European Union

European Commission - Fact Sheet

Questions & Answers: A European strategy for plastics

Strasbourg, 16 January 2018 (5)

QUOTE

The EU has already taken significant steps to reduce plastic waste – setting rules on marine litter and having achieved a significant reduction of plastic bag use in several Member States with the Plastic Bags Directive.

The European strategy for plastics will build on this, with the goal of ensuring that all plastic packaging is reusable or recyclable in a cost-effective manner by 2030.

UNQUOTE

QUOTE

The EU Action Plan for the Circular Economy was adopted in December 2015 – sending a clear signal to economic operators that the EU is using all the tools available to transform its economy, opening the way to new business opportunities and boosting competitiveness.

New rules on waste were also proposed in December 2015 and found political agreement in the Member States and the European Parliament on 18 December 2017. The new rules fix a new target of 55% recycling of plastic packaging waste by 2030, set a ban on landfilling separately collected waste and fix stronger arrangements for extended producer responsibility (EPR) schemes.

UNQUOTE

QUOTE

As regards so-called *oxo biodegradable plastics*, there is no evidence that they offer any advantages over conventional plastics. They do not biodegrade and their fragmentation into microplastics causes concern. Taking into account these concerns, the Commission will start work to restrict the use of oxo-plastics in the EU.

UNQUOTE

QUOTE

The Commission will encourage measures to expand separate collection of plastic waste, promote alternatives to single-use plastic items (e.g. in catering and take-aways), and later this month will propose measures to boost access to drinking water and reduce the impact of plastic water bottles.

UNQUOTE

European Union

Report from the Commission to the European Parliament and the Council on the impact of the use of oxo-degradable plastic , including oxo-degradable carrier bags, on the environment.

16.01.2018 COM (2018) final (6)

QUOTE

6. Conclusions

Taking into consideration the key findings of the supporting study, as well as other available reports, there is no conclusive evidence on a number of important issues relating to the beneficial effects of oxo-degradable plastics on the environment.

It is undisputed that oxo-degradable plastic, including plastic carrier bags, may degrade quicker in the open environment than conventional plastic. However, there is no evidence that oxo-degradable plastic will subsequently fully biodegrade in a reasonable time in the open environment, on landfills or in the marine environment. Sufficiently quick biodegradation is in particular not demonstrated for landfills and the marine environment. A wide range of scientists, international and government institutions, testing laboratories, trade associations of plastics manufacturers, recyclers and other experts have therefore come to the conclusion that oxo-degradable plastics are not a solution for the environment and that oxo-degradable plastic is not suited for long term use, recycling or composting. There is a considerable risk that fragmented plastics will not fully biodegrade and a subsequent risk of an accelerated and accumulating amount of microplastics in the environment, especially the marine environment. The issue of microplastics is long acknowledged as a global problem in need of urgent action, not just in terms of clean-up of littering, but also of plastic pollution prevention.

Claims presenting oxo-degradable plastic as an “oxo-biodegradable” solution to littering which has no negative impact on the environment, in particular by not leaving any fragments of plastic or toxic residues behind , are not substantiated by evidence.

In the absence of conclusive evidence of beneficial effect on the environment and indeed indications to the contrary, given the related misleading claims to consumers and risks of resulting littering behaviour, EU wide measures should be considered. Therefore, in the context of the European Plastics Strategy, as process to restrict the use of oxo-plastics in the EU will be started.

Ellen MacArthur Foundation

The Ellen MacArthur Foundation was established in 2010 to accelerate the transition to a circular economy.

The Ellen MacArthur Foundation’s [New Plastics Economy initiative](#) has published a statement calling for a ban on oxo-degradable plastic packaging. Signatories include M&S, PepsiCo, Unilever, Veolia, British Plastics Federation, Gulf Petrochemicals and Chemicals Association, Packaging South Africa, Greenpeace, World Wildlife Fund (WWF), Plymouth Marine Laboratory, and ten Members of the European Parliament. In total, over

150 organisations, including leading businesses representing every step of the plastics supply chain, industry associations, NGOs, scientists, and elected officials have endorsed the statement calling for global action to avoid widescale environmental risk.

**OXO-DEGRADABLE PLASTIC PACKAGING IS NOT A SOLUTION TO PLASTIC POLLUTION, AND DOES NOT FIT IN A CIRCULAR ECONOMY
EMF NEW PLASTICS ECONOMY DISCUSSION DOCUMENT(8)**

Oxo-degradable plastic packaging, including carrier bags, have in recent years been marketed as a solution to plastic pollution, with claims that such plastics, when they end up in land or aquatic environments, degrade into harmless residues within a period ranging from a few months to several years. However, a significant body of evidence indicates that oxo-degradable plastics simply fragment into small pieces, including microplastics, with the entire process of biodegradation into naturally occurring molecules requiring timescales often (far) in excess of those claimed by their manufacturers. The contribution of these plastics to microplastic pollution poses an environmental risk, particularly in the ocean. Furthermore, oxo-degradable plastics are not suited for effective long-term reuse, recycling at scale or composting. In summary, the evidence to date suggests oxo-degradable plastic packaging goes against two core principles of the circular economy: designing out waste and pollution; and keeping products and materials in high-value use. Therefore, we support applying the precautionary principle by banning oxo-degradable plastic packaging from the market. Similarly, existing evidence suggests this conclusion also holds for other plastic packaging that contains similar chemical additives, both organic and inorganic, for which claims of accelerated biodegradation are made, including enzyme-mediated degradable plastics.

Bio Based Press (7)

"Using oxo-degradable additives is not a solution for litter. Their use in waste management systems will likely cause negative outcomes for the environment and communities," said Erin Simon, Director of Sustainability Research and Development, World Wildlife Fund. "When public policy supports the cascading use of materials – systems where materials get reused over and over, this strengthens economies and drives the development of smarter materials management systems. This leads to wins for both the environment and society." As a result of the significant body of evidence raising concerns about the potential negative impacts of plastic fragments from oxo-degradable plastics, an increasing number of companies and governments have started to take action to restrict their use, in particular in Europe. For example, in the UK retailers such as Tesco and the Co-operative stopped the use of oxo-degradable plastics in their carrier bags. France banned the use of oxo-degradable plastics altogether in 2015.

- (1) www.ellenmacarthurfoundation.org
- (2) Regulations Governing Use of OxoPak Pty Ltd Registered Trademarks
www.ipaustralia.gov.au/sites/g/files/.../f/.../1852559_17102_initial_rules.pdf
- (3) O.W.S DSL-1 Aug-09.2013 Study DSL-1 Executive Summary
- (4) O.W.S DSL-1 Aug-09.2013 Study DSL-1
- (5) Eiropa.eu/rapid/press-release_MEMO-18.6-en.pdf
- (6) European Commission Brussels 16.01.2018 COM(2018) 35 Final
- (7) Ellen MacArthur Foundation NEW PLASTICS ECONOMY – OXO-DEGRADABLE PLASTIC PACKAGING IS NOT A SOLUTION TO PLASTIC POLLUTION AND DOES NOT FIT IN A CIRCULAR ECONOMY
- (8) www.biobasedpress.eu/2017/11/call-to-ban-oxo-degradable-plastics/

We remain at your disposal for additional information or clarification on any of the Submission.

We trust that this submission supports the ACCC in determining that there is no need for such a scheme as presented by the applicant and that there is no benefit at all in having these products available on the market for the consumer.

Thank you for the opportunity to provide our feedback.

Yours sincerely,

R Williams, signed electronically

Rowan Williams

President

Australasian Bioplastics Association Incorporated

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