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## TricorBraun Flex's Biotre® and Laws Regulating Environmental Marketing Claims

*The author of this article is not qualified to provide legal advice. TricorBraun Flex is not offering a legal opinion. We also are not responsible for our customers' product claims printed on their bags. For further information see our conditions of sale <https://www.tricorbraunflex.com/copyright-menu/conditions-of-sale>*

At TricorBraun Flex we want our product descriptions to be truthful and accurate. We endeavor to support our customers with knowledge about the flexible packaging industry that will be helpful to them. As the world works towards being more sustainable, conscious of global climate change, and protecting our natural environment, packaging is one area that receives focus from local, state, and national governments. The U.S. Federal Trade Commission has issued its "[Green Guides](#)" and [prosecuted companies making environmental claims they determined to mislead consumers](#). Several U.S. states [have laws](#) regarding the use of plastic packaging mostly focused on single-use plastic bags provided by grocery stores and other retailers. The state of California leads the way in enacting and enforcing laws regulating the use of plastic and includes laminated flexible packaging like **Biotre®**. Given these laws and the penalties allowed by them, we recommend to our customers based in or who may sell in California take an abundance of caution when describing the environmental benefits of their flexible packaging, including Biotre®.

The space available on a package for text, especially technical sounding text, is limited. This has led some well-meaning marketers in the past to print abbreviated descriptions of an environmental benefit on their packages e.g., if something was partially biodegradable, companies simply might print "biodegradable" on a package to refer to the portion that biodegrades. Consumers, however, likely inferred "biodegradable" to mean the entire package. This type of abbreviated reference is now seen by the FTC and California law to be a misleading environmental claim.

Other companies might have printed "compostable" on their package simply because a package supplier said the material was compostable without providing credible documentation of the statement. These companies felt it was the package supplier's responsibility to make an honest claim and they did not believe it was necessary to gain further understanding. This was especially tempting if the "compostable" package cost less than other packages with the same claim. Now, however, the California law penalizes the company who sells the package to the end-user whether they understand their own environmental packaging claims or not. This makes it incumbent on companies to understand the claims made by their suppliers.

Some companies may have made honest attempts to provide accurate claims but ran afoul of the law anyway. Still other, non-TricorBraun Flex customers, may dubiously have hoped the ambiguity of their environmental claims would imbue more "green" value to their product than really was there.

Because of these mistakes and more by companies in the past and considering current California and Federal laws, TricorBraun Flex strongly advises our customers **not print the words compostable, home compostable, marine degradable, biodegradable, degradable, decomposable, or any forms of those words** on their packaging. They should be careful to describe the environmental impacts and benefits of their products accurately and in ways that are easily understood by consumers in their most straightforward interpretation. Ultimately the laws enacted by California, the FTC and others protect consumers and are good for packaging suppliers who want to provide real, sustainable packaging solutions.

## Description of TricorBraun Flex's Biotre®?

Biotre® is a flexible packaging material composed of multiple, laminated layers and is suitable for dry products in need of oxygen and moisture barrier.

**Biotre® 1.0** has outer layers are made from wood pulp and cellulose from wood pulp. In **Biotre® 1.0** with Natural Kraft paper on the outside, the outer layers make up approximately 60% of the material by weight and have been shown to break down into healthy compost in 12 weeks when tested using conditions from a test method called ASTM D6868.<sup>1</sup> The interior, sealable layer in **Biotre® 1.0** is made with an additive that makes it “oxo-degrade”. This additive has been shown to allow plastic to break into microscopic pieces under specific conditions over 5-10 years vs. the estimated 1,000 years needed for typical plastic.

**Biotre® 2.0** includes the same outer layers as **Biotre® 1.0** which are shown to break down into healthy compost in 12 weeks when tested using conditions from a test method called ASTM D6868<sup>1</sup>, with the difference being that the interior, sealable layer on **Biotre® 2.0** is made of a plant-based, renewable resource, sugar cane. This is a durable i.e., non-biodegradable, layer made from renewable plant sources. The greenhouse gas CO<sub>2</sub> is absorbed and reduced during the plant's growth.

**Biotre® 3.0** is the culmination of ten years of Biotre® evolution. The entire material (all layers together in the form of a bag) has passed ASTM D6868 testing, and the total package is **certified compostable** by a third party testing service.<sup>2</sup> A majority of the film layers are made of plant-based, renewable resources (wood pulp, sugar cane, and corn) which absorb the greenhouse gas CO<sub>2</sub> during the plant's growth.

### **Biotre® takes a comprehensive approach to being environmentally friendly.**

- **Waste Reduction** – Biotre® can reduce the amount of packaging that ends up in long term waste storage like a landfill.
  - **Biotre® 1.0** and **Biotre® 2.0** – with the outer layers breaking down naturally in a composting environment in a relatively short period of time, packages can be processed in a home compost to convert 60% of material (**Biotre® 1.0** and **Biotre® 2.0** are not recommended for municipal or industrial composting). The inner layer can be removed from compost if found and disposed of with normal trash. 60% less material goes to the landfill.
  - **Biotre® 3.0** – NO material goes to the landfill. The bag breaks down sufficiently into healthy industrial or home compost (>90%). It converts into healthy compost which can be used to grow the next generation of plants. That's the definition of sustainable, renewable, and waste-less packaging.
- **Climate Change** – The plant-based components that go into Biotre® (wood pulp, sugar cane, and corn) absorb the greenhouse gas CO<sub>2</sub> through natural plant respiration prior to being used to make our Biotre® packaging. Absorbing and reducing the amount of CO<sub>2</sub> in the atmosphere helps stem the tide of global climate change.
- **Natural Resources** - Biotre® preserves our natural resources by reducing the use of finite fossil fuel and mineral resources and promoting the use of cyclical, sustainable sources. While most barrier packaging is made from almost exclusively petroleum-based plastics or aluminum foil, Biotre® film layers consist of anywhere for 60% to nearly 100% renewable plants depending on which version you use.

## Conclusion

The challenge for the marketer who wants to take advantage of the multi-faceted environmental benefits of Biotre® packaging is to:

- Use descriptions that are well founded, truthful, and accurate
- Stay within bounds of Federal and state laws, especially California's,
- Avoid California's regulated words for environmental claims
- Get the consumer excited about purchasing a package that is part of the global effort to be more sustainable, fight climate change, and protect our natural environment
- and fit all of that in the small space allowed on a package.

Challenge is a fitting word, but we believe it's worth the effort.

## Appendix

### Laws Regulating what you can print on a package in California

The California law regulating what can be printed on a package regarding environmental claims first became effective January 1, 2012 - [CA Public Resources Code Section \("PRC"\) Division 30, Part 3, CHAPTER 5.7. Plastic Products \[42355 - 42358.5\]](#). Section 42355 (b) of the law says its purpose is "...to ensure that environmental marketing claims, including claims of biodegradation, do not lead to an increase in environmental harm associated with plastic litter by providing consumers with a false belief that certain plastic products are less harmful to the environment if littered." The state of California's law accomplishes its purpose by mandating that "a person shall not sell a plastic bag that is labeled with the terms... 'compostable' or 'marine degradable' ...biodegradable, degradable, decomposable, or any form of those terms or in any way imply that the food or beverage container will break down, fragment, biodegrade, or decompose in a landfill or other environment" unless it meets the requirements of a specific test procedure. The tests it must pass are called ASTM D6400/D6868. These require a material to break down at least 90% in 12 weeks.

California district attorneys have sought and won costly penalties using this law. Here are examples:

- [Water bottles w/ ENSO additive](#)
- [\\$1 million settlement w/ Walmart over various products](#)
- [\\$500,000 settlement w/ Costco and Rogers Coffee Co. over coffee pods](#)
- [Overstock Agrees to Resolve Unlawful Environmental Claims](#)
- [Amazon Agrees to Pay for Unlawful Environmental Claims](#)
- [District Attorney Jill Ravitch announces greenwashing settlements with Chewy, Petco, Petsmart, and Target](#)

### A Note About Industrial Composting vs. Home Composting:

The term "home compostable" is being redefined in our times. Ten years ago, it meant that a thing would disintegrate in a compost pile that an individual household kept in their backyard for disposal of their food and yard waste. Now, "home compostable" is beginning to be understood in the packaging industry as having specific time frames and conditions associated with it. These are being defined by agencies and certification bodies such as the European Committee for Standardization (CEN) which is slated soon to publish a standard called DIN EN 17427. Other agencies that have their own certificates are TUV Austria

and DIN CERTCO. The general idea of these tests is for a bag to breakdown around 90% at a temperature around 58°C (136°F) in something like 26 weeks.

In industrial composting, the composition of the compost is actively managed, the chemistry and temperature are monitored, and the compost is mixed and turned using heavy equipment. These are large scale operations designed to achieve consistent quality compost with high throughput. A good-looking, nutrient and microorganism rich compost is desired for commercial use. The most well-known test to qualify a paper/plastic material for industrial composting is ASTM D6868. This test procedure mixes the material being tested with active compost and holds the mixture at a constant temperature of 58°C (136°F). It looks for no more than 10% of the material to remain after 12 weeks.

Biotrē® 1.0 and 2.0 will disintegrate 60% using the ASTM D6868 conditions, but because industrial composters need materials that disintegrate at least 90%, we don't say these pass ASTM D6868 or are industrial compostable. We say ASTM D6868 conditions were used to show 60% disintegration. To dispose of a Biotrē® 1.0 and 2.0 bag, we say to place the bag in your home compost, however, given the evolving understanding of the term "home compostable" we must be careful to differentiate between our materials which have been observed by us to disintegrate relatively quickly in home compost and those that are certified "home compostable." We have not tested Biotrē® by any of the home compostable standards.

Biotrē® 3.0 has fully passed ASTM D6868 and is industrial compostable which means it will break down 90-100% in an industrial composter. It should by correlation also break down 90-100% in a home managed compost pile, but, again, we have not run tests with Biotrē® 3.0 using any of the "home compostable" standards or certificate agencies at this time.

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<sup>1</sup> Biotrē 1.0 & 2.0 have been tested using ASTM (American Standard Test Method) D6868 test conditions but did not pass the requirement to have no more than 10% remaining after twelve weeks.

<sup>2</sup>Biotrē 3.0 – Third-party testing verified that it meets all specifications in ASTM D6868 which determines if a material will compost in large scale aerobic municipal or industrial composting where maximum throughput is a high priority and where intermediate stages of plastic biodegradation should not be visible to the end user for aesthetic reasons.