

ARTAXERKES® www.artaxerkes.com	Products and biodegradables and compostable resins
	<p>Biodegradable and compostable resins are mainly produced from corn and potatoes starch, from agricultural industry.</p> <p>In future generations (by analogy to fuels), resins will be extracted from inedible algae, and other agricultural materials which are very abundant in some regions such as cassava, banana, bamboo or miscanthus wastes to prevent any competition with even animal food.</p>

Combined with the increase in the quantities produced around the world, this will help to lower the cost of production of vegetal resins.

Biodegradable and compostable resins are used today to make most of flexible packaging (industrial films, simple thickness or multiple layer films) that are used as is or are included in the manufacture of finished products (thin shopping bags, shopper bags, water pockets, garbage bags, bags for dog waste).

Vegetal resins commonly called **bioplastics** replace polyethylene films whose production is increasingly monitored, regulated or banned in more and more countries both of the North and South.



The polyethylene produced by the oil industry, is indeed recognized as a top environmental nuisance in some areas of the world where in the absence of sound waste management, preservation of Nature and Environment has necessarily led to eradication of these plastic bags, for their outright ban.

In the Southern Countries, the plastics bags are a much greater nuisance than elsewhere.

Plastic bags need more than 400 years to reprocessing, and in that space of time, their accumulation hinder agriculture, create visual and olfactory pollution, killing wildlife on land and in the seas by absorption, and finally causes public health situations. Many studies have been written on these subjects.

In [Africa](#), in particular, new environmental standards also impacting the industrial ecosystem of these countries have been enacted or are under development in **Gabon, Congo, DR Congo, Ivory Coast, Senegal, Togo, Benin, Ghana, Burkina Faso, Mali, Mauritania, Niger, Cameroun, Angola, Chad, Uganda, Kenya, Tanzania, South Africa, Madagascar, Tunisia, Morocco** are all citing ban of plastic bags from the oil industry and their replacement with biodegradable bags as mandatory measure.

Although it is still necessary that the term "[biodegradable](#)" is well defined. Some companies producing chemical additives comprising heavy metal compounds claim that their additives make plastic bags made of polyethylene oxo degradable or "biodegradable" as a result of [Greenwashing](#). This is of course a heresy, as demonstrated by the [NGO H₂O Gabon](#) through its Scientific Advisory Board in the [following analysis](#), which was addressed to the President of the

Republic of **Gabon**.

The advantage of biodegradable and compostable resins versus traditional polyethylene resins (our current bags) is their **rapid degradation in the environment** (5-6 months on average), leaving no environmental footprint. The simple use of these resins allows the organization of a more rational management of organic waste they wrap after their first life, and recreate a value by recycling in fine.

At a country level, to **manage the higher cost of biodegradable and compostable resins** versus conventional polyethylene resins, the best method would be in a first time:

- ✓ reduce the needs artificially created by the consumer society,
- ✓ generalize the dual-use of the bags,
- ✓ massify purchases and negotiate customs exemptions,
- ✓ streamline the management of waste (by sorting), including composting the organic
- ✓ waste to create green fertilizers to also reduce the use of chemical fertilizers and maintain soil.

As it has been well explained by the environmental authorities of **Rwanda** who have banned plastic bags in their country in 2008, in this recent [TVDoc](#), the cleanliness of the cities is a necessary condition for economic development. A serious management problem of plastic waste is imperative for that reason alone, especially since it facilitates the development of an industrial ecosystem (including recycling).

The use of biodegradable and compostable resins allows to get into a ecological and economic virtuous circle, protecting the Environment and future generations. Paraphrasing chemist, French philosopher and economist **Antoine Lavoisier** : "[Nothing is lost, nothing is created, everything is transformed.](#)"

Our Commercial Offer

We distribute a large production unit based in Asia (ISO 9001 certified.) which annually provides more than 20,000 MT of biodegradable and compostable resin according to [EN 13432](#) with the [OK Compost](#) certificate issued by [Vincotte](#) (Belgium) and [Din Certco](#) (Germany) Laboratories and / or biodegradable and compostable resins at + 60% (ISO 14855) when it is made necessary for technical or cost reasons, with an adhoc **OK Biobased** certificate from **Vincotte** Labs.

This strong industrial investment allows to be very competitive in terms of production costs.

We serve our customers (transformers, distributors or final users) efficiently.
Thank you to kindly contact us by expressing your needs (type and quantity).
Our working basis is usually the shipping container (resins or finished or semi-finished goods), but we know how to adapt to your requests.

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