



– Press release –

## Carbios achieves a new key milestone in the development of its controlled biodegradation process for disposable soft plastics

**Clermont-Ferrand, France, July 16th, 2014** – Carbios (NYSE Alternext in Paris: ALCRB), an innovative green chemistry company specializing in breakthrough technologies dedicated to the recovery of plastic waste and the production of bio-polymers, took a new significant step forward in the development of its controlled biodegradation process for disposable soft plastics.

**With its innovative process, Carbios obtained completely biodegradable plastic material in domestic conditions. This plastic material issued from an oil-based polymer and an enzyme has a controlled kinetic that loses 50% of its mass in 15 days and completely biodegrades in less than three months.** This results underlines that the technology of Carbios is an effective industrial answer to address the legal evolutions to better control the end-of-life of disposable and short life plastics

With the support of its longtime partner VALAGRO, the co-owner, along with the CNRS (the French National Centre for Scientific Research), of the Patent Application WO 2013/093355 A1 called "Method for preparing a polymer/biological entities blend," whose exclusive worldwide license was acquired by Carbios, the company will draw on this success and continue to develop its controlled biodegradation process for disposable soft plastics. At the end of 2013, Carbios managed to preserve catalytic activity of enzymes after adding them to plastic material and exposing them to temperatures as high as 338°F to its composition.

Today's step forward allows Carbios to consider commercial applications on a global scale for this material, including in the agricultural sector, particularly for mulching films, and in the packaging industry, especially for disposable food, another strategic market targeted by the company.

*"We are proud of this new breakthrough, which emphasizes the synergy between Carbios and our academic partners as well as the efficiency of our approach and which will bring us one step closer to an industrialized process. This significant advance shows that we can envision an expansion of Ségolène Royal's amendment<sup>1</sup>, without jeopardizing France's environmental goals or the plastics industry's ambitions,"* concluded Jean-Claude Lumaret, CEO of Carbios.

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<sup>1</sup> Promoted by Ségolène Royal, France's Minister of Ecology, Sustainable Development and Energy, an amendment was recently added to the biodiversity bill currently under review by the French Parliament to ban from supermarkets single-use plastic bags that are not home compostable and not entirely or partially made of bio-based materials, beginning January 1<sup>st</sup>, 2016. While Carbios supports this new measure, which is consistent with its strategy, the company would like the amendment to adopt a more holistic approach and expand its aim to include all types of biodegradable plastic materials, and not just bio-based ones.

## **About Carbios**

Carbios is a young innovative green chemistry company, whose mission is to find biological solutions to the environmental and sustainable development issues faced by industrial businesses today. Carbios acquired the rights to research that was conducted over a number of years by various public and private sector laboratories. By leveraging the unique properties of biological catalysts (enzymes), it has used this research as the foundation for developing innovative industrial bioprocesses that optimize the technical, economic and environmental performance of polymers (thermoplastic materials and synthetic or food-based fibers). The company has focused its efforts on a strategic application sector: plastics. Carbios' growth strategy is based on a clear business model of industrial value creation that targets attractive markets, develops innovative and competitive bioprocesses and licenses them to major industrial stakeholders for commercialization. Carbios benefits from the financial support of the leading European venture capital firm Truffle Capital. Carbios was founded in 2011 and, since its inception, has been managed via the  *Holding Incubatrice Chimie Verte*  fund. Carbios was granted the label "Young Innovative Company" by BPI France (former OSEO) and is eligible for investments by private equity mutual funds (FCPIs).

For more information, please visit: [www.carbios.fr](http://www.carbios.fr)

Carbios is eligible for the PEA-PME, a government program allowing French residents investing in SMEs to benefit from income tax rebates.



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