



– Press Release –

CARBIOS: new success with the synthesis of PET oligomers from biorecycled terephthalic acid

Clermont-Ferrand, France, June 13, 2017 (6:45 AM CEST) – CARBIOS (Alternext Paris: ALCRB), pioneer company in the field of bioplasturgy, announces that it has taken a new step forward with the production of PET oligomers made out of terephthalic acid coming from its biorecycling process of PET plastic bottles.

The synthesis of PET is carried out in two major steps:

- The first, considered to be the most critical, consists in the synthesis of PET oligomers from monomers of terephthalic acid and mono ethylene glycol.
- The second allows the synthesis of PET by polycondensation of the oligomers previously obtained.

By succeeding in this first step, CARBIOS demonstrates that it is now possible to use PET plastic waste rather than fossil resources for the synthesis of PET oligomers.

CARBIOS previously demonstrated that it had successfully depolymerized PET bottles into its initial monomers. A first scale up of the process has since been performed. After a proof of concept at the scale of one hundred milliliters, this depolymerization was carried out in reactors of 5 and 100 liters. At such last scale, 20 kilos of PET have been treated and depolymerized at 90%. Performances of the depolymerization process were perfectly identical regardless of the reactors volume, showing by then the strength of this technology. At the end of the depolymerization process, the terephthalic acid produced has been collected and purified. Its purity reaches a level above 99% and analytic technics of reference do not allow to make any difference with commercial terephthalic acid produced from oil.

“We have demonstrated that the purity of the terephthalic acid obtained through our original enzymatic process allows the efficient synthesis of PET oligomers. This is a new important step that reinforces the industrial potential of our technology. We are very confident in the forthcoming demonstration of a complete recycling of PET waste into new PET bottles of same quality as the original products. It is now our short-term goal before operating, with key players of the PET value chain, a pilot plant and launching the industrial demonstration of the process” comments Alain MARTY, Chief Scientific Officer of CARBIOS.

About CARBIOS:

CARBIOS is a green chemistry company whose innovations are designed to meet environmental and sustainable development issues faced by global industrial players. Since its creation in 2011, CARBIOS has developed two industrial bioprocesses dedicated to the biodegradation and the biorecycling of polymers. These breakthrough innovations, which are a worldwide premiere, leverage the highly specific properties of enzymes to optimize the performances and the life cycle of plastic and textile materials. CARBIOS' economic development model is based on the industrialization and commercialization of its products, enzymes, technologies, and bioprocesses via the concession of licenses, directly or via joint ventures to major industrial players in the sectors that can make use of the Company's innovative technologies. For instance, CARBIOS created in September 2016, the joint-venture CARBI-OLICE, in partnership with Limagrain Céréales Ingrédients and the SPI investment fund run by Bpifrance. This company, controlled by CARBIOS, will operate the first patented enzymatic biodegradation technology licensed by CARBIOS by producing enzymated pellets to be used for the production of a new generation of bio-sourced and biodegradable plastics. Since inception, CARBIOS benefits from the financial support of the leading European venture capital firm [Truffle Capital](#). CARBIOS was granted the label "Young Innovative Company" by Bpifrance (former OSEO) and is eligible for investments by private equity mutual funds (FCPIs).

For more information, please visit: 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.



Contacts :

CARBIOS

Benjamin Audebert
Investor Relations
+33 (0)4 73 86 51 76
contact@carbios.fr

Alize RP

Caroline Carmagnol / Wendy Rigal
Press Relations
+33 (0)1 44 54 36 66 / +33 (0)6 48 82 18 94
carbios@alizerp.com