

Transforming waste into a new plasticizer and new compounds

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Have you ever wondered what happens to a water bottle when you throw it away? Once the single-use bottle hits the recycle bin, we hope it will be transformed into something special or disposed of responsibly. It's not very often that we can be part of responsible transformation, but that is exactly the goal of Alphagary's team at the Altamira (Mexico) facility.

Working with a supply partner who converts plastic PET bottles into a chemical, the team is conducting trials using this chemical to produce DOTP (Dioctyl Terephthalate) plasticizers. The DOTP plasticizer – used to make PVC compounds soft and flexible -- is in high-demand because of its usability across a wide range of applications including medical, industrial goods and footwear. By creating a new DOTP plasticizer with recycled content, Alphagary is generating additional capability to meet growing demand while providing a pathway to reuse over 150 million PET bottles annually!

Over the next several months, the DOTP Project Team will work to refine the process throughout the plasticizer production cycle. As a second initiative, the team is looking at compound applications in areas such as footwear and garden hoses where the new plasticizer can be utilized. Once technical characteristics are verified, the introduction of a new compound series with recycled content will follow and will be celebrated as an additional milestone toward reducing our footprint on the environment.

The impact of the DOTP Project is truly incredible. Based on current estimations, the new plasticizer could eliminate over 5,000 tons of PET garbage per year. By giving new life to recycled PET in the form of a new plasticizer and a new compound series, Alphagary is demonstrating its responsible and sustainable commitment to innovation while providing a solution to increasing customer demand.

For more information about Alphagary's materials (plasticizers, stabilizers, compounds, and colorants), please contact your local representative or email us at enquiries@alphagary.com