



The Association of  
Plastic Recyclers



Meets Critical Guidance

The Association of Plastic Recyclers  
2050 M Street NW  
Washington, DC 20036

April 11, 2023  
Bas Blom  
Avantium Renewable Polymers BV  
Zekeringstraat 29  
1014 Amsterdam, The Netherlands

Dear Mr. Blom:

The Association of Plastic Recyclers (APR) is pleased to recognize that PEF resin (with the specified IV), produced with the YXY® Technology and submitted by Avantium Renewable Polymers, meets or exceeds the most strict APR PET Critical Guidance criteria of the PET-CG-01 Critical Guidance Protocol for Clear PET Resin and Molded Articles, when used at 10% or less as the middle layer of a PET multilayer bottle. This APR recognition is based on the technical recyclability of the specifically produced multi-layered bottle with a specific PEF barrier layer and placement of same.

A Review Committee, appointed per the APR Recognition Operating Procedures, reviewed and concluded the submitted data to be correctly obtained by a 3rd -party, independent and qualified laboratory and demonstrate that the multilayer bottles provided for the evaluation meet or exceed the most challenging test conditions and strictest APR Critical Guidance criteria.

The PET Critical Guidance documents that were used to evaluate the PEF barrier layer innovation submitted by Avantium, are the product of a multi-industry consensus process to identify and address certain key technical considerations related to the recycling of postconsumer PET containers. The Documents direct innovators to conduct specific testing per established testing procedures and then provide the innovator with guidance to interpret the results. The protocols are intended to help improve the quality of the recycled PET container stream by aiding innovators to make informed decisions about the consequences of packaging innovations. APR thanks Avantium, for voluntarily submitting this PEF innovation for Recognition. The impact of these protocols is beneficial to world-wide recycling efforts.

While this Recognition speaks to the compatibility of your PEF innovation with PET container recycling, it does not speak to collection of containers or include other barrier materials in the market that may conflict with the PET container recycling process. Meeting the Critical Guidance Document guidelines is a truly significant step in demonstrating overall recyclability of your multi-layer bottle product.

Yours truly,

A handwritten signature in black ink, appearing to read 'A. Blom'.

President and CEO