



CASE STUDY

PLA-Premium

Technology:

Application:

W 721-F

Thermoforming

Chocolate Alveoli Packaging

“PLA-Premium shows similar moulding properties than PET”

ADBIOPLASTICS helped a manufacturer of thermoformed packaging to introduce more sustainable PLA based compostable packaging in its portfolio, while keeping quality performance, transparency, acceptable shrinkage and thickness variation, cycle times, and existing thermoforming line and mould.

CHALLENGE	Our customer was a manufacturer of rigid and semi-rigid plastic packaging with a production site in Spain addressing domestic markets such as: Food, Cosmetics, Hardware, Toys, Horticulture, Livestock, etc. The company’s staff was aiming at offering its portfolio of customers biobased and compostable material alternatives, given the many requests received for biodegradables and business expectations. However, they had no experience in this regard in thermoforming from PLA based bioplastic sheet.
SOLUTION	<p>The product selected by the manufacturer for trial was a PET referenced square shaped light alveoli inner tray for cookies or pastries assortment (weight 38 g, Length/ Width: 300 mm; Height 20 mm, Thickness: 0,3 mm), presenting some challenge in terms of design and in terms of processing like time of cycle, temperature, etc.</p> <p>Our technical team previously reviewed the customer’s PET reference sheet and discussed with the manufacturer’s staff current PET processing conditions to align them with existing equipment possibilities. To ensure a successful trial of PLA Premium extruded sheet. PLA Premium W 721-F grade 300 microns thick sheet was suggested as the most suitable to face the challenge. Equipment could be easily fine-tuned by the customer along the trial. Immediate very good look alveoli results were confirmed on-site.</p>
RESULT	The result of the test and the samples were considered by the customer as satisfactory and deserved to be shown by the commercial area to sound the interest among customers. The customer is interested in trying the product with other possible products such as cup and lid, or some other alveoli with lid. Besides, it underlines the greater interest in premium pastry food and pharma packaging.
HIGHLIGHTS	<ul style="list-style-type: none"> ● No need of new investment: It can be processed on the same equipment as PET by changing processing parameters. ● Very competitive cycle time. It does not make a difference with PET. ● The shape of the container is similar to PET version, shrinkage and thickness variation is not an issue. ● The transparency is similar with regard to PET reference