



CASE STUDY

PLA-Premium	Technology:	Application:
W 751	Cast extrusion	Shelf-retail price tag holder

“PLA-Premium shows good extrusion processing with regard to PVC”

ADBIOPLASTICS helped two manufacturers of extruded profile to introduce more sustainable PLA based compostable price holder in its portfolio, while keeping quality performance, transparency and existing extrusion line and cast mould.

CHALLENGE	Our two customers were, on one hand a building division of a multinational provider of polymer and composite products for industry and end-users, on the other hand, a domestic high quality plastic profile extrusion company with experience in different materials, pure PLA included. Both companies were aiming at meeting the needs of its portfolio of customers about looking for more sustainable and performing label holders, so as at collaborating with domestic and more secure PLA based solution's suppliers. Which were a PVC commodity extrusion product to replace with PLA-Premium. The first in a rigid price holder for retail refrigerator chest application. The second in a swingarm price holder for shelf retail application. The challenge was to have a first trial and a matrix adapted to the label holder profiling maker. The main product requirements were: processing fluidity, transparency, impact resistance/ resilience, and hinge strength.
SOLUTION	The product selected by the manufacturer for trial were two PVC referenced price holders: a “U” shaped rigid one (Height 53 mm Width 30mm, Thickness 1,5mm), and the swing folded one (Width 48 mm, Thickness 1mm), presenting some challenge in terms of design and in terms of processing. Our technical team previously reviewed the customer’s PVC and pure PLA reference grades and discussed with the manufacturer’s staff current processing conditions to align them with existing equipment possibilities. To ensure a successful trial of PLA Premium, PLA Premium W 751 grade was suggested as the most suitable to face the challenge.
RESULT	The result of the test and the samples were considered by the customers as satisfactory in different aspects. In first case results were presented to a specific client who liked them. The producer stated that the trial had good transparency, although less resilience than PVC. Despite the mold used was designed for PVC, geometry with the PLA was nearly 100% achieved. However, the customer commented that the compound would be extrudable without great problems in a mold designed for PLA-Premium rheology, and that would be also interested in trying with another mold geometry. Anyway, a custom formulation could also improve fluidity.
HIGHLIGHTS	<ul style="list-style-type: none"> ● No need of new investment: It can be processed on the same equipment as PVC by changing processing parameters. ● Good transparency ● The geometry of the piece is similar to PVC version, shrinkage and thickness variation is not an issue.