

FAQ plastic/aluminum/plastic laminates and metallized plastics (13/12/2024)

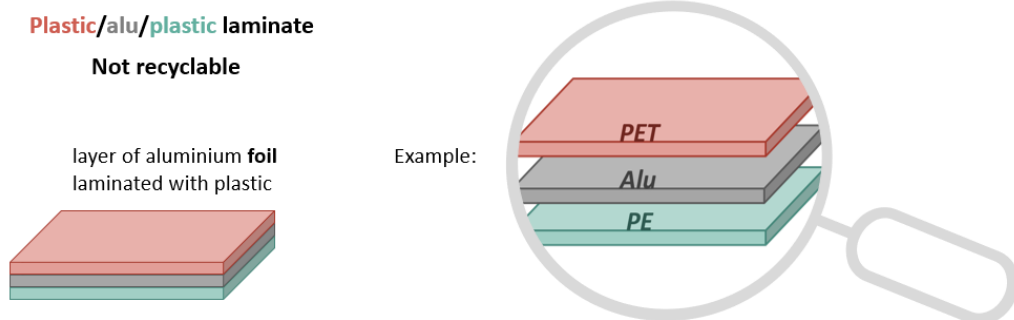
The world of recycling and sustainable packaging is changing rapidly. So make sure that you have the most recent version of this document. You can always find it on [Fost Plus website](#).

What packaging and materials are we talking about?

This factsheet discusses two types of packaging that have a similar appearance and are sometimes used for the same applications. However, their composition is very different.

Plastic/aluminum/plastic laminates

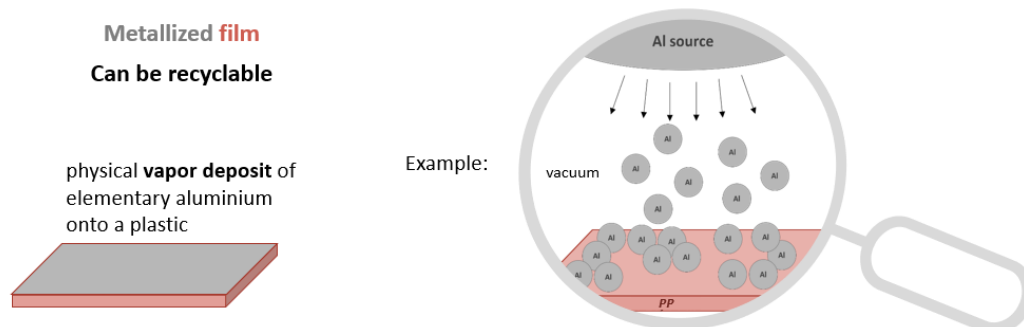
In plastic/aluminum/plastic laminates (also called aluminum laminates), the aluminum layer is laminated between two layers of plastic. The plastic layers can consist of PET on the outside and PE on the inside, for example. The aluminum layer is several microns thick.



Examples of applications: wet pet food packaging, flexible coffee, juice or soup packaging, etc.

Metallized plastic

For a metallized plastic, a very thin layer of aluminum is applied to the surface of a plastic film via vacuum deposition technology. The aluminum layer is less than one micron thick.



Examples of applications: crisp bags and individual biscuit wrappers.

What happens to these packaging today?

Allowed in the blue bag

This is because since the extension of the sorting rules, almost all plastic and metal packaging can be sorted with PMD. Until the end of 2024, the consumer sorting rules still included a number of exceptions for packaging made of a combination of different materials (e.g. coffee bags, fruit juice bags and wet pet food). In 2025, these packaging will no longer be listed as unauthorized in the blue bag, as the majority will be converted to recyclable alternatives by 2025.

No recycling solution is available for plastic/aluminum/plastic laminates

Plastic/aluminum/plastic laminates are not recyclable. This is because the different layers cannot be separated from each other in today's recycling infrastructure. At the end of the sorting process, they end up with the residues, after which they are incinerated with energy recovery.

Because the packaging is not recyclable, it falls into the highest Green Dot fee category, with a rate that is at least double the highest recyclable rate.

As they are a combination of materials, plastic/aluminum/plastic laminates also pose many problems in sorting centers and in the recycling chain. They are often misidentified by machines in sorting centers, which means that they end up in either aluminum packaging or plastic packaging streams. This is also the reason why they are part of the list of obstructive packaging established by the Interregional Packaging Commission (IVCIE).

However, a recycling solution is already available for the vast majority of **metallized plastic packaging**. After separation, the flexible packaging made of metallized polypropylene (PP) end up in the fraction of the 'other plastic films', which is mainly sent to our partner Ecoo in Houthalen for further processing. They are recycled as material for flower pots and road signage tools, for example. Flexible packaging made of metallized polyethylene (PE) are recycled in the 'PE film' stream. However, we are still investigating the compatibility of these films with the PE stream.

Our recommendations

Plastic/aluminum/plastic laminates: switching to recyclable alternatives as soon as possible

We advise our members to immediately replace plastic/aluminum/plastic laminates with recyclable alternatives. This is because they are not recyclable and disrupt our sorting and recycling processes. Various sectors have committed to bringing only recyclable packaging to the market by the end of 2025. We also expect that this type of packaging will eventually be completely phased out in Europe.

Recycling metallized plastics: favor transparent materials

We recycle metallized films in our 'PE films' or 'other plastic films' streams. However, transparent materials are better suited for recycling than metallization, as the metal gives a coloration to the recycle. With metallized films, it is also important to ensure NIR (near infrared) detectability. If a large part of the metallized surface is visible to the naked eye, this can cause problems with near-infrared detection in sorting centers. For more advice on this, please do not hesitate to contact us via our [website](#).

What are the alternatives?

More and more easily recyclable alternatives are coming to market. For recycling, we prefer flexible packaging with transparent barriers such as SiO_x, Alox or EVOH, at a maximum amount of 5% of the total weight of the packaging. These materials are even more recyclable than metallized films.

Green Point fees

You can check the Green Dot contribution rates for the different materials on [our website](#).