



Why is aluminium foil great for packaging?

Let's look at its highly unique properties

Good machinability and advanced speeds for sealing

Essential for retort pouch – **allowing sterilization**

Easy to print, laminate, coextrude, lacquer

Its **deadfold property** saves adhesives

It provides operational excellence during conversion and filling

It provides absolute barrier

Prolongs shelf life for a variety of perishable goods

Acts as gatekeeper – keeps good things in and bad things out

Preserves nutritional value, taste and consistency

Effective protection at very low thickness

It can easily be **sorted and recycled** after use

Specific **mechanical properties** e.g. “push-through”

It can easily be formed and stays strong

It is **heat resistant** and conducts heat

All advantages of aluminium material – at low thickness

Also, it helps to save resources

Even very **low foil thicknesses** (0.006mm and less) allow full barrier

Aluminium foil enables lightweight high-barrier packs

Enables the amount of **other associated materials in the pack to be minimized**. The same barrier functionality without aluminium foil would require significantly more material

Outstanding **low packaging-to-product ratio** (5 to 10 times lower than rigid alternatives)

Less material used and therefore **less waste generated**

Less energy used for transport – whether the packaging is filled or empty

High barrier allows for **long life conservation without refrigeration**, thus saving energy

Lightweight foil packaging saves material and energy resources

Only 1.5g of aluminium foil in an aseptic beverage carton enable the perfect preservation of 1 litre of milk for months

1/3 of food produced globally is never eaten – representing a **major wastage of resources** and unnecessary greenhouse gas emissions

Foil packs help to prevent food waste

Aluminium foil's absolute barrier preserves valuable goods and prevents them from being lost. It provides a packaging option for **extended shelf-life, customized portion packs, thus reducing risks of food waste** at the retail and consumer level

Aluminium foil saves much more resources than it consumes

And it is fit for circular economy

First, aluminium foil packaging must be properly collected

Many initiatives of the industry to improve its recycling

Packages with aluminium as major component can be easily **recycled via the regular aluminium recycling stream**

For laminates with aluminium foil, **pyrolysis can be used to recover the aluminium**

In waste to energy operations aluminium foil can be **partially recovered from the bottom ashes** and then recycled

Aluminium as material can be recycled **without loss of quality** and reused in new aluminium products. 75% of all aluminium ever produced is still in use

Aluminium foil can be recycled

No successful recycling without appropriate collection

When collected, foil packaging can **easily be separated in a sorting centre** by using eddy current separators and even more advanced technologies

Proper collection also **prevents packaging from leaking** into the environment

Continuous improvement of collection, separation and recycling technologies will increase the recycling rates of aluminium foil

The aluminium industry established a **European wide network of national aluminium packaging recycling organisations** to improve the recycling of aluminium packaging including aluminium foil

Key stakeholders of the entire flexible packaging value chain initiated the CEFLEX project to **improve the end-of-life-performance of all flexible packaging incl. composite aluminium foil applications**

Technologies like delamination and chemical recycling are under development helping to “separate” the aluminium foil from composite packaging for recycling

Aluminium packaging recycling rate in Europe exceeds already 60%

And its overall resource efficiency supports a circular economy beyond just recycling!