



Tetra Brik[®] Aseptic 1000 Edge LightCap[™] 30

Carbon footprint report example



Primary information contained in this report

- Certified package cradle-to-grave carbon footprint(s) that meet the requirements of the PAS 2060 standard on carbon neutrality.
- Certified carbon footprint(s) reduction for packages with plant-based polymers based on cradle-to-grave results that may be used to support public communication.
- “Plant-based” is used in the tables to describe versions of the package containing plant-based polymers in the opening and/or in the packaging material.

Certification



The carbon footprint of the included packages and the reduction have been certified by the Carbon Trust according to PAS 2050:2011, ISO 14044:2006 and ISO 14067:2018. More information is available at www.carbontrust.com/tetrapak.

Use of the Carbon Trust name and label need to be in line with relevant licence agreements and guidelines.

Scope of the carbon footprint

Cradle-to-grave, including: raw material production, transport of raw materials, packaging material converting, closure converting, film extrusion and blowing, strip production, transport of packaging materials to filler, forming and filling of the package, transport of packaging materials to distribution centre and end-of-life.

The terminology of ISO 14067:2018 has been used, which means that all relevant greenhouse gas (GHG) emissions and removals are covered in the term “carbon footprint”. The carbon footprint results are expressed in CO₂ equivalents (CO₂e).

Package footprint data

Package:

Tetra Brik® Aseptic 1000 Edge LightCap™ 30

Packaging material quality:

/ml BIO CLC Dup

Geographic scope:

Tetra Pak Global Average v9

PrintDated:

2023-05-24



Cradle-to-grave carbon footprint (g CO₂e/package)

	Standard packaging material		Plant-based packaging material	
	Standard opening	Plant-based opening	Standard opening	Plant-based opening
Total Cradle-to-grave	67	61	61	56

Carbon footprint % reduction for packages with plant-based polymers based on cradle-to-grave results

	Standard packaging material		Plant-based packaging material	
	Standard opening	Plant-based opening	Standard opening	Plant-based opening
Reduction	-	-8%	-8%	-16%

Package properties

	Standard packaging material		Plant-based packaging material	
	Standard opening	Plant-based opening	Standard opening	Plant-based opening
Package weight, incl. opening (g)	32	32	32	32

Biogenic carbon (g CO₂/package)

	Standard packaging material		Plant-based packaging material	
	Standard opening	Plant-based opening	Standard opening	Plant-based opening
Biogenic carbon in material	29	39	38	47

Geographic scope

Calculations based on Tetra Pak global average data.

Raw material: For the production of paperboard and aluminium foil, global average data from Tetra Pak's GHG reporting is used representing the performance in the last full reporting year.

For the production of plastics, data as presented by Plastics Europe is used (www.plasticseurope.org) and for the production of plant-based plastics, data is from the Braskem 2017 study "I'm green™ PE Life Cycle Assessment".

Converting: Global average data from Tetra Pak's GHG reporting is used for converting operations and for the transport of raw materials to the converting factory. The packaging material waste rate in converting is used to calculate the impact to produce the extra raw materials required, which is allocated to the "converting" results.

Forming and filling: Global average data from Tetra Pak's GHG reporting is used for the transport of packaging materials to the filler, and the forming and filling of the package. The calculations are based on the most recent version of the filling machine, relevant for the type and size of the package. Data for the transport of packaging materials to a distribution centre is modelled based on average distances and transport emission factors from Tetra Pak's GHG reporting.

End-of-life: The end-of-life scenario represents the global average situation for cartons, based on Tetra Pak statistics. The "cut-off" method has been used when modelling end-of-life: no environmental burdens nor credits have been included in the results for cartons going to recycling or incineration with energy recovery. End-of-life results include impacts from incineration without energy recovery and landfill.

Rounded numbers are shown in the carbon footprint report. Unrounded numbers have been used when calculating the results.

Calculations

The calculated results are not exact; they are indicative and based on a number of simplifications.

For this package, we have used a representative material specification as the basis for the calculation of the results.

Biogenic carbon in packaging material

Plants capture and store carbon from the atmosphere. When wood fibre is processed into paperboard, or sugar-cane into plant-based polymers, the finished packaging material contains biogenic carbon captured from the atmosphere. The estimated biogenic carbon content of the packaging material as it leaves the Tetra Pak factory gate – the biogenic carbon in the material – is presented separately and not included in the carbon footprint results, as required by ISO 14067:2018.

Updates and revisions

The results are based on version 9 of the Tetra Pak internal "Carton CO₂ Calculator" model, valid from 2023.

The Carton CO₂ Calculator model has been certified by the Carbon Trust. The model is periodically updated to ensure that the latest available emission factors and material specifications are applied. Therefore the current results generated by the model may not be directly comparable with those generated in earlier versions.

