

PULP-BASED TRAYS RANGES

SUITED TO THE «COLD LINK» PROCESS

100% REUSABLE
COMPOSTABLE ACCORDING
TO EN13432 NORM



Made from bagasse:
natural fibrous residue
from sugarcane "waste".



HEAT-SEALABLE

01/2025

To meet today's challenges, Firplast Vision-Verte and its design office have been innovating for 40 years, developing sustainable, recyclable solutions for professionals. We offer 100% compostable packaging in compliance with EN13432.

In a circular economy approach, our GN Vision-Verte trays are made from 100% natural materials.

**Vision
Verte**
Emballer l'avenir !

VALUATION PROCESSES

Once these trays have been used, there are two possible recovery processes: composting or methanization. This enables packaging waste to be reused to produce compost or energy in the form of biogas.

THE PRODUCTION PROCESS

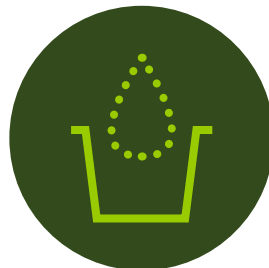
Our «Liaison Verte» trays are manufactured in 4 successive stages, as described below. It is identical for all our ranges of fiber trays.

1



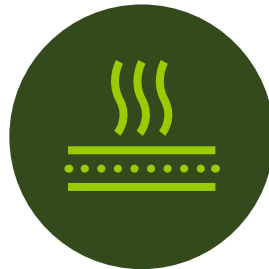
MATERIAL PREPARATION

Once the raw material has been collected, the cellulose plant fibers are mixed with water. This forms a moldable paste.



Molding

The paste is evenly distributed in the molds that define the different shapes of the trays.



Drying

The wet fibrous pulp is pressed between two heated forms and dried to become solid.



Lamination

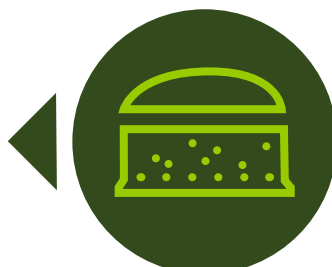
The inside of the formed trays is lined with a compostable* film of plant origin, making them watertight and sealable.

*According to EN13432 OK Compost Industrial norm.

2

METHANIZATION

Methanization is based on the principle of anaerobic digestion in a microbial ecosystem: the process of decomposing organic matter is governed by micro-organisms in the absence of oxygen. Shredded beforehand, all organic waste is fermented in the plant's digester, sheltered from the air. After decomposition, the organic waste generates agricultural fertilizer and biogas, which can be used to generate electricity or heat.



INDUSTRIAL COMPOSTING

In industrial composting centers, reusable trays are crushed and mixed with bio-waste. The mixture is then divided into heaps, which are turned over and watered to facilitate fermentation. In the industrial composting process, the temperature is regulated. This not only destroys the bacteria, but also reduces the processing time compared to domestic composting. After just 3 months, the resulting compost can be spread on fields and gardens.



USES SPECIFICITIES

3

Below is a comparative table of all the specific applications of the different tray ranges offered by FIRPLAST.

Biosourced materials of plant origin:

PLA (Polylactic Acid) is a bioplastic made from the starch of plant materials such as wheat, corn and potatoes. All the trays in these ranges are coated with a thin film of PLA on the inside and on the sealing edges. This coating enables trays to be sealed with plastic film OR bioplastics.

PULP is a biopolymer that is the main constituent of plant cell walls, including wood. Most trays are made from an agglomerate of plant fibers of different origins, depending on their range:

- **Sugarcane fibers** are derived from the “waste” residues after sugar extraction. The particularity of this material (also known as “pulp”) enables the manufacture of high-quality white trays.

	Pulp trays from sugarcane «waste»	«Regular» trays in polypropylene plastic (pp)
Re-heat	✓	✓
Steam cooking	✗	✓
Micro-onde	✓ 750 W for 5 min	✓ 750 W for 15 min
Water bath-cooking	✗	✓
Freezer	✓ Up to -20°C	✓ Up to -20°C
Re-heat	✓ From -20°C to +130°C	✓ From -20°C to +130°C
Heat-sealing (2)	✓ Between +110°C and +130°C	✓ Between +150°C and +170°C
Suitable sealable foil	✓ (See page 8)	✓ PET/PE; Monomatière et autres
Biodegradable	✓ In industrial units according to EN13432 norm	✗
Certifications	✓ Certified « OK Compost »	✗

(2) Sealing temperature changes according to foils types and heat-sealing trays settings.



A

COV8T
Translucent PP flat lid
for GastroNorm 1/8 tray
164 x 134 x h 25 mm



1

BIO3230250
GastroNorm 1/8 - h 25
160 x 130 x h 25 mm
300 ml-10.1 oz



2

BIO3230360/C
GastroNorm 1/8 - h 36
160 x 130 x h 36 mm
400 ml-13.5 oz



3

BIO3230450/C
GastroNorm 1/8 - h 45
160 x 130 x h 45 mm
500 ml-16.9 oz



7

BIO3210450
GastroNorm 1/4 - h 45
265 x 162 x h 45 mm
1100 ml-37.2 oz

8

BIO3210550/C1
GastroNorm 1/4 - h 55
265 x 162 x h 55 mm
1400 ml-47.6 oz

4

**THE RANGE OF
GASTRONORM
TRAYS IN PULP**
COMING FROM BAGASSE:
SUGARCANE RESIDUE
«WASTE» COMPLIED TO
EN13432 NORM

If you want suited
lids, please contact our
sales team to learn
more.



+ TRACEABILITY **+** CIRCULAR ECONOMY

www.firplast.com



+ WASTE-TO-VALUE

+ A VIRTUOUS ECO-BUSINESS MODEL



4 **BIO3230460**
GastroNorm 1/8 -
2 compartments - h 46
160 x 130 x h 46 mm
554 ml-18.7 oz



5 **BIO3220450/C1**
GastroNorm 1/6 - h 45
176 x 162 x h 45 mm
800 ml-27 oz



6 **BIO3220460**
GastroNorm 1/6 - h 46
2 compartments
176 x 162 x h 46 mm
810 ml-27.4 oz

C **COV2**
Translucent PP flat lid
for GastroNorm 1/2 tray
330 x 272 x h 32 mm



9 **BIO3190480/C**
GastroNorm 1/3 - h 48
323 x 172 x h 48 mm
1700 ml-57.5 oz



10 **BIO3180520/C**
GastroNorm 1/2 - h 52
325 x 265 x h 52 mm
3200 ml-108.2 oz

E **314045COVP**
APET flat lid for 1, 2 and 3
compartments tray
232 x 183 x h 416 mm



11 **BIO3140451/C**
MENU 1 compartment
227 x 178 x h 45 mm
1200 ml-40.6 oz



12 **BIO3140452/C**
MENU 2 compartments
227 x 178 x h 45 mm
1105 ml-37.4 oz



13 **BIO3140453/C**
MENU 3 compartments
227 x 178 x h 45 mm
970 ml-32.8 oz

+ WASTE-TO-VALUE

+ A VIRTUOUS ECO-BUSINESS MODEL



14 **BIO3140375**
TMF tray
137 x 96 x h 45 mm
375 ml-12.7 oz



15 **BIO3140500**
TMF tray
137 x 96 x h 45 mm
500 ml-16.9 oz



16 **BIO3140750**
TMF tray
192 x 137 x h 41 mm
750 ml-25.4 oz



17 **BIO3141000**
TMF tray
192 x 137 x h 55 mm
1000 ml-33.8 oz



18 **BIO3250250**
OBLONG TRAY PULP+PLA
158 x 102 x h 25 mm
220 ml-7.4 oz



19 **BIO3250350**
OBLONG TRAY PULP+PLA
158 x 102 x h 35 mm
320 ml-10.8 oz



20 **BIO3250450**
OBLONG TRAY PULP+PLA
158 x 102 x h 45 mm
400 ml-13.5 oz



21 **BIO3250550**
OBLONG TRAY PULP+PLA
158 x 102 x h 55 mm
500 ml-16.9 oz

+ ALSO AVAILABLE IN BLACK

- 14**
- 15**
- 16**
- 17**



ENVIRONMENT, QUALITY, HEALTH, VALUES AND SUSTAINABLE COMMITMENT

5

Firplast's commitments :

- ISO 9001 certified to guarantee customer satisfaction as part of a continuous improvement process.

- ISO 14001 certified for its commitment to the environment.

- complies with regulatory and legal requirements, approved for food contact (tests carried out by SGS and Pourquery laboratories).

- OK COMPOST certified by TÜV Austria for our "Liaison Verte" range of trays

To obtain the OK COMPOST label, which complies with European standard EN13432,

several tests were carried out by the OWS laboratory:

- Biodegradation Test
- Disintegration test
- Ecotoxicity test
- Heavy metals and fluorine analysis test



FIRPLAST has been awarded the HOPITECH 2016 sustainable development trophy for its "LIAISON VERTE" range of 100% recoverable trays, and for its involvement in research into recoverable materials for over 15 years. HOPITECH is a major event in the hospital sector, helping to invent the hospital of tomorrow, where sustainable development will play a key role.

FIRPLAST is also one of several European partners, along with the National Institute for Agricultural Research (INRA), helping to support the international research project entitled: "GLOPACK - Granting society with low environmental impact innovative packaging" as part of the European HORI-

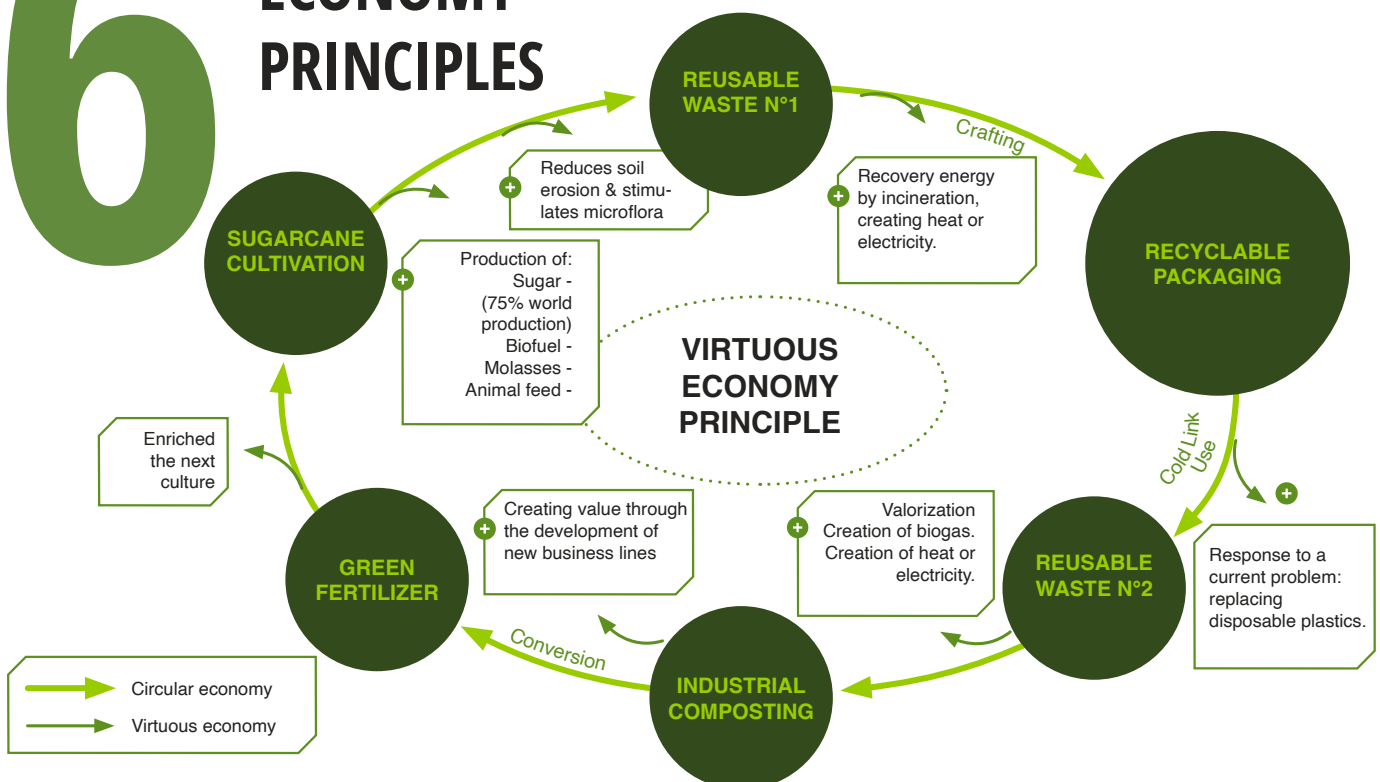
ZON-2020 program. The aim of this project is to facilitate access to innovative, eco-designed packaging for consumers and companies. Based on the concept of the circular economy, the project aims to reduce packaging waste and food waste.



6

VIRTUOUS ECONOMY PRINCIPLES

Here's a diagram of the circular economy that revalorizes waste.



7

THE RANGE OF SEALING FILMS FOR PULP TRAYS



FIRPLAST offers a range of films suitable for sealing on manual, semi-automated and automated heat-sealing machines. For each roll of film, we offer a wide choice of sizes, widths and lengths, according to your needs.

Our range of cellulose trays meets all quality requirements and is part of an environmentally responsible approach:

- ✓ SUITABLE FOR FOOD CONTACT
- ✓ IMPERVIOUS TO GREASE, WATER AND SAUCES
- ✓ OPERCULABLE
- ✓ SUITABLE FOR COLD STORAGE
- ✓ SUITABLE FOR TRANSPORT
- ✓ RESISTANT TO RETHERMALIZATION
- ✓ COMPLIANT WITH EN 13432 STANDARD
- ✓ CERTIFIED «OK COMPOST»

FIRPLAST also offers you a wide choice of molds with manual, semi-automatic and automatic sealing machines made in France!



DESIGNATION	SKU	COMPOSITION	THICKNESS
Universal film	FROUNIV	PET12/PEPU50	62μ
Monomaterial Film(117S)	FREX	Polyester	28μ



(1) «OK Compost» certified sealing film and EN13432-compliant

