
GIRO
GIRO
Compostable packages

Sustainable Packaging Systems

From Giró, as a leading company in the development of net packaging solutions, we are committed to new material research and packaging technologies that allow us to offer respectful solutions for the environment as well as sustainable within the fresh product packaging industry.

NET PACKAGING

THE PREFERRED SYSTEM BY CONSUMERS FOR YEARS

Avoid condensation inside the bag and keep the product fresh

Allow you to see and smell the product inside

ecoGIRÓ

EcoGiró is the brand through which Giró expresses its commitment to the environment and sustainable development

How?

100 % recyclable packages

100 % compostable packages

ecogiró

100% *recyclable*

GIRO's 100% recyclable packages allow us to:

OPTIMIZE the amount of plastic used in each package, thus reducing the environmental impact.

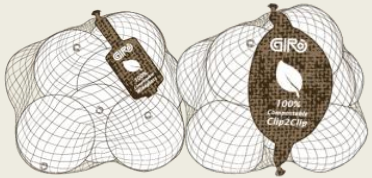
RECYCLE the package once used to transform them back into raw materials ready to be used again, thus promoting a circular economy.

GIRO's 100% compostable packages allow us to transform these materials into organic matter (compost) once used, thus promoting the circular model.

ecoGIRÓ

100% *compostable*

ecoGIRÒ



Clipped compostable bag

Thermalwelded compostable bag

Cellulose compostable net

GIRCEL NET

Compostable labels

WINEGLASS & C2C

Compostable Net PLA+PBAT

GIRBIO NET

Compostable Films

GIRBIO FILM

GIRCEL NET

GIRCEL net is knitted with cellulosic fiber yarns.

This fiber is obtained from the wood pulp, coming from FSC certified eucalyptus plantations, thus guaranteeing its sustainable forest management.

GIRCEL NET

Fabrication process

1. Raw material

Eucalyptus wood is obtained from FSC certified sustainable plantations.

2. Chemical treatment

The pulp is hydrolyzed in order to dissolve it in water and obtain the viscous.

3. Extrusion

It is extruded with dilute acid. The disolved cellulose regenerates and forms the cellulosic fiber.

4. Drying

The fibers pass through a dryer and moisture is removed.

5. Yarn

The fibers are stretched, oriented, and twisted to form threads.

6. Tincture

The threads are dyed and wound into cones to knit the threads together.

7. Knitting

The thread cones arrive at Giró and the tubular net is knitted.

8. Finish

The knitted net is arranged in sleeve format, pressed, packaged and sent to the customer.

COMPOSTABLE LABELS

Those are composed of a triplex of materials formed by Transparent Cellulose, PLA and Paper.

The Transparent Pulp and Paper come from FSC certified sustainable plantations. PLA is obtained from GMO Free plantations that do not compete with human consumption.

COMPOSTABLE LABELS

Fabrication process

1. Raw material

Wood and starch are obtained from FSC and GMO Free certified plantations.

2. Chemical treatment

The raw material is subjected to a chemical treatment to convert the wood into pulp and the starch into lactic acid.

3. Indicted

The pulp is processed to obtain the Transparent Cellulose and Paper. Lactic acid is polymerized and PLA is obtained, extruded and wound.

4. Lamination

The 3 components are laminated, leaving the PLA in the inner layer. Transparent Cellulose and Paper provide rigidity and PLA resistance

5. Printing, die cutting and winding

The design is printed on the cellulose, the labels are die-cut and wound and placed in boxes

GIRBIO NET

GIRBIO net is obtained by mixing 2 compostable biopolymers: PLA and PBAT.

PLA provides resistance and is obtained from corn starch. PBAT provides elasticity and is obtained from 3 substances: Adipic acid (AA), Butandiol (BD) and Terephthalic acid (PTA).

GIRBIO NET

Fabrication process

1. Raw material

PBAT precursors are obtained by products from GMO Free plantation refineries and starch.

2. Chemical treatment

Adipic acid, butanediol and teraphthalic acid are obtained mixed and on the other hand lactic acid. The monomers are polymerized and pellets of PBAT and PLA are obtained

3. Extrusion

Compostable pellets arrive at Giró, PBAT and PLA are extruded and reels are obtained.

4. Yarn

The reels are cut to obtain the rafia that will later be knitted.

5. Knitting

The rafia is knitted with the same procedure as the standard knitted net.

6. Finish

The net is available in reel format and distributed on pallets.

GIRBIO FILM

The GIRBIO film is made up of 3 compostable materials: PLA, PBAT and PAPER.

It contains PLA and PBAT as the GIRBIO net, but a paper layer is added on the front also to differentiate this package and easily identify it as compostable. This paper layer comes from sustainable plantations and is FSC certified.

GIRBIO FILM

Fabrication process

1. Raw material

Wood is obtained from FSC certified plantations, starch from GMO Free certified plantations, and PBAT precursors are generated as by products from refineries.

2. Chemical treatment

Wood becomes pulp. Adipic acid, butandiol and terephthalic acid are obtained and mixed. The starch is transformed into lactic acid.

3. Transformation

The Pulp is processed to obtain the paper in reel format. Adipic acid, butanediol and terphthalic acid polymerize to PBAT form.
Lactic acid polymerizes and PLA is formed.

4. Extrusion & Lamination

PBAT and PLA are mixed in an extruder and reels are manufactured. The paper is printed with the corresponding design and laminated with the extruded reels.

5. Cutting & Winding

The mother bobin is cut to the specified bandwidth, wound and shipped to the customer.

Selective collection

All compostable products in the ECOGIRÓ range are OK Compost Industrial certified. This means that they must be separated together with the Organic Fraction of Municipal Waste, that is, the Brown container.

In addition, the consumer can take advantage of the packaging itself to deposit organic waste such as the skin or shells of fruit and vegetable products and separate them together into the organic fraction.

Finally, the GIRCEL net also have the OK Compost Home certificate, which means that they are suitable for home composting.

INDUSTRIAL COMPOST

Biodegradation must take place in an industrial composing process through a collection system to produce compost.

OK compost

TÜV AUSTRIA

INDUSTRIAL

GIRO
Sustainable Packaging Systems

HOME COMPOST

Biodegradation can be carried out in a home composting container under very restrictive conditions to produce compost.

END OF LINE MANAGEMENT

Compostability depends on the chemical structure, not on the origin of the material. Therefore, a compostable material will be managed in the same way both if it is obtained from corn or if it is obtained from fossil resources.

It is important to remember that the current problem of conventional plastic comes from the current **waste management policies, not from obtaining raw materials.**

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