b4logic

Good plastics. Circular with meaning.

Good plastics.
Circular with meaning.

Bio-based.
Biodegradable.
Circular.

What if through circularity you could tell a unique story?

CIRCULAR LIFE CYCLE

Business By-products

Valorization of organic and inorganic by-products associated with your company's development area, allowing you to create an emotional relationship with your product.

Compounding Development

Formulation of the compounding based on the circular recovery of previously treated waste, allowing to obtain differentiating products.

Use and Consumption

Our compositions are used to create several types of products and packaging in different sectors, which serve their purpose.

Decomposition and Biodegradation

After use, products designed with our bio-based formulas can return to the ground without harming the environment.

CIRCULAR LIFE CYCLE

Results in 65% of energy savings

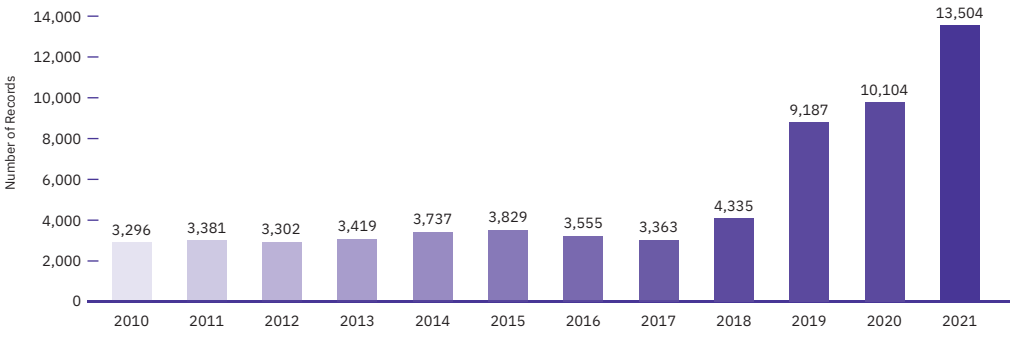
In the production of biomaterials, with similar characteristics to conventional plastics.

The cycle of Circular Future.

Since 2021 innovating, to contribute to a better world.

In addition to the Circular Economy policies that have largely dominated innovation agendas, the production, use and conservation of biological resources also aim at a sustainable economy strategy, as shown by the increasing numbers of records in recent years related to biomaterials:

Evolution of the use of biomaterials over the last 10 years



_Biodegradable, Compostable or Recyclable?

What are the differences?

Biodegradable

Materials that are decomposed in nature by the action of microorganisms, such as bacteria, fungi and algae.

Compostable

Materials that are decomposed into non-toxic components, such as water and carbon dioxide, yielding organic compounds (humus). Completely biological degradation process.

Recyclable

Materials that at the end of the life cycle of use of a given product can be reprocessed and used for the development of new products.

Good plastics.
Circular with meaning.

At B4Logic we are dedicated to the development and compounding of biomaterials, based on the valorization of natural by-products from different types of industries, which allow us to obtain bio-based and biodegradable products.

By-product

B4Logic Material

Circularity as a means of storytelling, unique to you

Our compoundings tell the story of your product's origin and create more empathetic bonds with your end consumer.

Naturally

Watch case study

Since 2021 creating biomaterials that adapt to your business.

Recognized by the University of Minho for the innovative nature of the company in scientific and market terms, through the attribution of spin-off status, currently being part of the MSTN Group.

Universidade do Minho SPINOFF

MSTN group

_Why B4Logic?

Biodegradable

Biodegradable material at the end of its life cycle, reducing environmental impact compared to conventional plastics.

Customization

Possibility of developing compoundings according to your needs.

Circular

Combined with the ease of customization, your compounding can allow the valorization of by-products associated with your business area.

Scale

Possibility of developing small and large scales of raw material.

Differentiation with B4Logic biomaterials

Having the opportunity to create unique packaging and products that tell the story of its origin and create more empathetic bonds with the final consumer through circular models.

Our compounds adapted to your business.

Since 2021, thinking about circular and biodegradable solutions for the future.

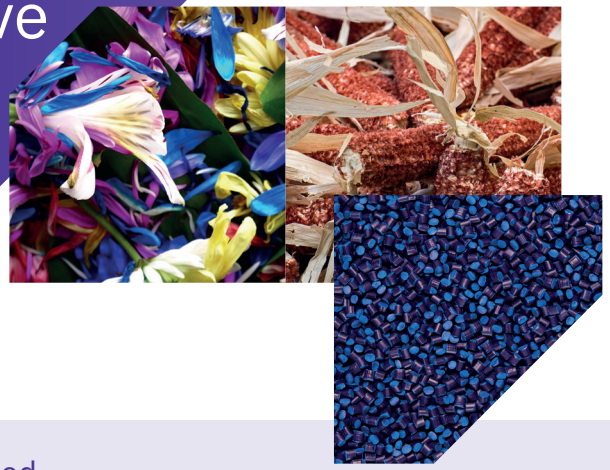
Due to world population growth, coupled with the increasingly intensive overexploitation of natural resources for the raw materials extraction, and the increasingly significant deposition of end-of-life products in landfills, it is essential to rethink solutions that allow the circularity and valorization of by-products.

Pre-Compounded Compoundings

Biodegradable polymer base + Wood, Coffee, Cork, Slate and Limestone Waste

Compoundings available for application in the development of different types of products for different sectors of application.

What if you could have an exclusive formulation for your brand?



Custom compounding developed exclusively to tell the story of your product.

Biodegradable polymer base + Your by-product

Compoundings to be developed specifically for you, depending on your business typology, by valuing the by-products generated within the scope of it, promoting its circularity.

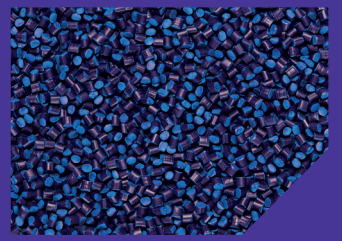
_What is the B4Logic process?

1_Industry By-products

Valorization of by-products associated with your company's development area, allowing you to create an emotional relationship with your product.

2_Laboratory Treatment

Based on the technical and scientific knowledge of B4Logic, manipulation of the by-product in order to guarantee its correct combination with the biodegradable polymeric base.



3_Development of Compounding

Formulation of the compounding based on the circular recovery of previously treated waste, allowing the production of differentiating products.

Imagination is the limit.
Processes and Applications

Customized solutions to integrate into your production line.

Biomaterials are developed to suit the different requirements of processing technologies.

Processes and Technologies

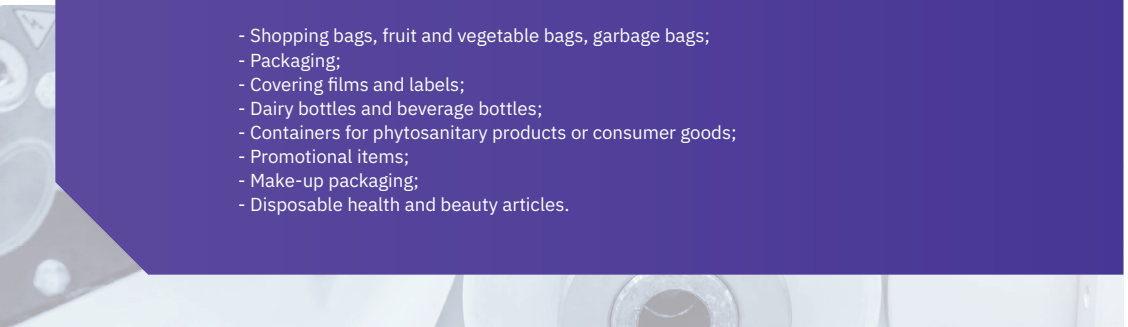
Injection | Extrusion | Blow molding | Thermoforming

Application Areas

Consumer goods | Agriculture | Cosmetics | Automotive | Packaging | Textile

Ideal for:

- Shopping bags, fruit and vegetable bags, garbage bags;
- Packaging;
- Covering films and labels;
- Dairy bottles and beverage bottles;
- Containers for phytosanitary products or consumer goods;
- Promotional items;
- Make-up packaging;
- Disposable health and beauty articles.



Technical
Datasheets

Injection Molding

Reference	Density (g/cm³)	MVR (cm³/10min)	Melting Temperature (°C)	Young's Modulus (MPa)	Renewable Content (%)
b4slate _ I365	1,58	14	110 –140	3220	≈100
b4limestone_ I365	1,58	14		3220	
b4wood_I365	1,36	9		3350	
b4coffee_I365	1,38	11		3270	
b4cork_I365	1,37	11		3330	
b4slate _ I300	1,65	13	120-150	850	≈35
b4limestone_ I300	1,63	13		860	
b4wood_I300	1,37	11		945	
b4coffee_I300	1,39	12		870	
b4cork_I300	1,38	12		930	

Blow Molding and Film Extrusion

Reference	Density (g/cm³)	MVR (cm³/10min)	Melting Temperature (°C)	Young's Modulus (MPa)	Renewable Content (%)
b4slate _ E365	1,52	4	120-150	230	≈45
b4limestone_ E365	1,5	4		240	
b4wood_E365	1,31	3		270	
b4coffee_E365	1,33	3		260	
b4cork_E365	1,29	3		270	

Thermoforming

Reference	Density (g/cm³)	MVR (cm³/10min)	Melting Temperature (°C)	Young's Modulus (MPa)	Renewable Content (%)
b4slate _ E300	1,47	5	140-170	2020	≈75
b4limestone_ E300	1,44	5		2110	
b4wood_E300	1,27	3		2150	
b4coffee_E300	1,28	3		1990	
b4cork_E300	1,26	4		2040	

What if through circularity we could solve real problems?

With a biodegradability rate of 74%, at the end of 45 days, the project "The Good Bottle" presents itself as a case of success that marks the change of the world industry in favor of sustainability, aiming to reduce the amount of plastic present in our oceans which, in turn, have destroyed the existing ecosystem.

NATIONAL GEOGRAPHIC

JN

RTP NOTÍCIAS

The time for change is now.

Why move forward now?

Only 9% of plastic is recycled

According to recent estimates of plastics production and recycling, currently only 9% of the 400 million tonnes of plastics produced annually worldwide are recycled.

Use of by-products

The customization of our compoundings based on the valorization of by-products from different types of industries, in addition to reducing their impact on the environment, also allows you to create an emotional relationship related to your business area.

Need to reduce dependence on fossil resources

1970 was the last year in which the Overshoot Day was not reached, the day in each year when the consumption of natural resources made available by the Earth is depleted. Since then, the annual period of consumption of the ecological budget on credit has been increasing. In 2022, that day was reached on the 28th of July.

65% of energy saving

The production of biomaterials, with characteristics similar to conventional plastics, can be up to 65% more energy efficient.

Be the first

Be the first to use biomaterials as a form of emotional connection to the end consumer. Switch to biomaterials that have meaning.

What stories do your products tell?

For a circular world
through bio-based plastics.

+351 234 799 120
info@b4logic.com