

PRODUCT

Polypropylene ST^{bio} – *biodegradable* blown film of polypropylene by extrusion.



PRESENTATION

COILS (tube, semi tube, sheet, etc.) and **BAGS AND OTHER FORMATS** (pouches, sheets, tubes, etc.)

COMPOSITION

The product is a single-layer compound of polypropylene homopolymer (No CAS 9003-07-0) and copolymer (No CAS 9010-79-1), with a new masterbatch of biodegradable technology.

Additives: this product may contain:

N° CAS	Dual use
128-37-0	E321

All raw materials are listed in the Union list of authorised substances that may be intentionally used in the manufacture of plastic layers in plastic materials and articles set by Regulation (EU) 10/2011 as amended.

Printed Film: we use specific flexographic inks which are made and formulated in accordance with "EuPIA" and "CEPE's Good Manufacturing Practices. They don't contain any SVHC listed in the candidate list of the ECHA. However, the inks used are not biodegradable.

For more details, see the Declaration on printing inks "**DEC-FLX-EN**"

FEATURES

- Good optical and mechanical properties
- Excellent heat-sealing properties
- It does not leave microplastics or harmful substances in the post-degradation process

EXAMPLES OF APPLICATIONS

- Food packaging
- Textile packaging
- Flower packaging
- Packaging film

NON SUPPORTED APPLICATIONS

- Medical, pharmaceutical or healthcare applications (because the film doesn't comply with the Pharmacopoeia)
- Use in conventional or microwave ovens

STORAGE AND HANDLING

The polypropylene film should be stored in dry conditions at temperatures **between 18°C and 50°C** and protected from UV-light. Improper storage can initiate degradation, which results in odour generation and colour changes and can have negative effects on the physical properties of this product (blocking, acceleration of the biodegradable process, etc.)

Some particles of the film need to stabilize to get their correct physical and mechanical properties, so the polypropylene film should not be handled for at least one week after manufacture and must be stored under the above conditions.

The surface tension will remain within acceptable limits until **6 months** from the date of manufacture and if has been stored in the conditions provided.

The biodegradation process under normal conditions of use will finish in less than 11 months from the date of manufacture of the film ⁽¹⁾. Subjecting the film or finished product to natural decomposition agents, that is, sunlight, air, heat and humidity, will accelerate the biodegradation process.

RECYCLING

The product is **100% recyclable** through the conventional recycling stream, within the defined useful life of the product.

SAFETY

The product is not classified as dangerous preparation according to Regulation (EC) 1272/2008 (CLP), so the product doesn't need to be classified nor labelled. However, inhalation of dust can cause irritation to the respiratory system. Prolonged inhalation in high doses of the decomposing product may cause headaches or irritation of the respiratory tract.

It is not mandatory to issue a Safety Data Sheet, because the product does not meet the requirements of Article 31 of Regulation (EC) 1907/2006 REACH.

Incompatible materials: Chlorine, fuming nitric acid and strong oxidizing agents (can release gaseous CO₂)

BIODEGRADATION AND FOOD CONTACT

The biodegradable masterbatch used is a patented technology designed to impart biodegradability to the polyolefinic material in the open environment. It develops its superior performance from the synergistic action of all natural decomposition agents, that is, sunlight, air, heat and humidity, in addition to the effect of synthetic or "prebiotic" imitators that attract microorganisms in an early stage.

Unlike oxo-additives, this technology **does not leave** behind **microplastics** and allows a **safe and complete biodegradation** in carbon dioxide, water and biomass in **less than eleven months** ⁽¹⁾ from its date of manufacture.

Ecotoxicity tests meet the criteria for ecotoxicity tests and, therefore, products made with this film are considered not harmful to contact with soil, plants and the aquatic environment.

This product complies with:

- PAS 9017:2020: standard for the biodegradation of polyolefins in an open-air terrestrial environment (Report IMP4710-LR, issued by Impact Laboratories Ltd – independent plastics experts) ⁽¹⁾
- Regulation (EU) 10/2011 and its subsequent amendments, for food contact applications ⁽²⁾

⁽¹⁾ The tested sample reached 99% biodegradation in 336 days.

⁽²⁾ See the Declaration of Conformity (**ST^{bio}-DoC-EN**)

SPECIFICATIONS

TOLERANCES	
Thickness	Tolerance
23 μ up to 40 μ	± 8 %
41 μ up to 61 μ	± 5 %
61 μ up to 140 μ	± 3 %
Parameter	Tolerance
Served quantity	1%

Disclaimer:

Document issued by the Quality and Product Safety Department.

The information provided in this document has been compiled based on our own information, the information provided by our suppliers and according to the latest knowledge available and applicable legal requirements.

We assume no responsibility for any misinterpretation or misuse of this document.

It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products.

No liability can be accepted in respect of the use of Plásticos Francés' products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third-party materials.