PAPER RECYCLABILITY : CEPI METHOD

SAFE SUSTAINABLE SOLUTIONS

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In the current context, sustainability has become an essential element in the packaging sector. European and Italian regulations are promoting the use of increasingly recyclable materials, and consumers prefer brands that adopt eco-friendly solutions. But how can you concretely demonstrate the recyclability of your packaging?
Our specialized laboratory offers recyclability testing services based on the CEPI method, a standard recognized at the European level. This test allows for the evaluation of the actual recyclability of cellulosic materials, such as paper and cardboard, providing certification that enhances your product's market positioning.

Why perform CEPI recyclability tests?

- **Compliance with European regulations:** Our tests follow the CEPI protocol, ensuring that your packaging meets the requirements to be considered industrially recyclable within the European framework.

- **Compliance with the 4Evergreen Protocol (Part I):** 4evergreen is an alliance of over 100 manufacturers, designers, brand owners, researchers and recyclers who want to contribute to a climate neutral society by perfecting the circularity and sustainability of fibre-based packaging

- **Greater market competitiveness**: Proving the recyclability of your packaging allows you to meet the demands of brand owners, large-scale retailers, and companies increasingly focused on sustainability.

- **Compliance with the new PPWR:** The CEPI test already assigns a recyclability level, providing a concrete tool to demonstrate compliance with the new Packaging and Packaging Waste Regulation (PPWR).

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THE FOOD CONTACT CENTER SOLUTION

In Italy, the recyclability test can only be performed by laboratories authorized by Aticelca — the Italian authority responsible for auditing labs to ensure that recyclability tests are conducted correctly according to the Aticelca 501:2025 standard, the UNI 11743:2019 and CEPI method. This guarantees that the results are reliable, officially recognized, and fully compliant with industry requirements. By choosing a certified laboratory like ours, you can be confident in receiving a valid assessment for official certifications and gaining access to the economic incentives provided by current regulations.

How does the CEPI test work?

The material receives a rating that clearly indicates the recyclability level of the product. CEPI provides the method to assess the reciclability of a product, then to assigns a recyclability score it is use the 4evergreen protocol: the scale ranges from 100 to 0, where products scoring below 0 are not considered recyclable. The table below shows the score related to the “High Screening Yield,” one of the key parameters used to assess recyclability, as an example.

Additionally, the various tests required by the CEPI are also listed.

- Removal of any manually separable components
- Determination of dry matter content
- Pulping and dilution of the sample
- Measurement of coarse rejects and preparation of the first accepted fraction
- Measurement of flakes
- Measurement of adhesive particles (macrostickies)
- Formation of laboratory sheets for adhesion testing and evaluation of optical inhomogeneities

The Recyclability Evaluation Protocol assesses the technical recyclability of fibre-based packaging products treated under different conditions by different recycling mill process types. Three types of paper recycling mills with different processes :

- recycling mill with conventional process
- recycling mill with flotation-deinking process
- recycling mill with specialised process

Depending on which mill process is considered for the assessment, the test method needs to be adapted.

Score	Score interpretation
100 - 90	The packaging creates a high screening yield in a recycling mill with conventional process and is therefore considered ‘best in class’.
89 - 70	The packaging creates an acceptable screening yield, but the rejects could already have an impact in a recycling mill with conventional process.
69 – 50	The screening yield of the packaging is high for a recycling mill with conventional process, but it is suggested that the packaging should be further optimised for recycling.
49 – 0	This packaging creates a significant amount of rejects which can lead to technical problems in the screening step in a recycling mill with conventional process
< 0	The reject of this packaging is too high for the recycling process in a recycling mill with conventional process and should not be recycled in such a process

The Laboratory Director

Rev.0 03/07/2025