

January 2021

Harmonised European laboratory test method to produce parameters enabling the assessment of the recyclability of paper and board products in standard paper and board recycling mills Version 1 (1 December 2020)

Side letter for stakeholders

The Cepi recyclability laboratory test method version 1 was finalized in December 2020.

This first harmonised European test method defines a laboratory procedure emulating the most relevant phases (pulping, screening, sheet formation) of a typical paper mill dedicated to the recycling of the most common grades of paper and board without deinking technology or other special features. In particular the method defines the main parameters to measure in order to verify the recyclability of paper based materials and products:

- Ease at which the fibres can be separated in a standard device.
- The potential to form sheets out of the recovered fibres without significant disturbances.
- The visual appearance when formed into sheets.
- The level of coarse and fine rejects.
- The level of fragmentation of disturbing materials (adhesives, metals, plastic film).
- The presence of suspended or dissolved materials resulting from non-paper product parts in the tested sample

Following a consultation on a first draft among Cepi, the European Paper Recycling Council and 4evergreen, the draft has been revised and the following main elements have been added:

- The scope and applicability of the test method has been clarified in the title and introduction.
- For assessments of deinkability or recyclability in specialised mills, additional tests are needed¹.
- The method does now include a calculation of dissolved and colloidal solids below 10 microns.
- Additional standards and documents widely used and agreed in the industry are referred to.
- The consistency and pulping time has been reviewed and confirmed.

Next steps:

The harmonised test method is the basis for further steps undertaken in 4evergreen workstream 1, which develops a recyclability evaluation protocol based on values generated by applying the test method:

- Products will be tested according to the method, results interpreted and partly checked against trials at pilot/mill scale and update needs identified.
- Evaluation schemes are studied and a protocol structure with threshold values will be proposed.
- Additionally, enhanced/specialized recycling processes are mapped and a test approach mimicking those will be proposed, to be also considered for the evaluation protocol.

The test institutes will further gather information and experiences from using the method in view of its completion planned for the end of 2021. Until then, the method should not be used in isolation to declare products recyclable/non-recyclable. It should be referred to as Cepi recyclability laboratory method version 1 and not be revised by other parties.

¹ Standard and specialised mills as described in paper based packaging recyclability guidelines by Cepi, ACE, Citpa, FEFCO: <https://www.cepi.org/paper-based-packaging-recyclability-guidelines/> For assessments of Deinkability: European Paper Recycling Council: www.paperforrecycling.eu