

Frequently asked questions on the Cepi laboratory recyclability test method:

1. Is the Cepi recyclability test mandatory?

There is no legal obligation to verify the recyclability of materials and products according to the Cepi system. For packaging, there may be legal requirements at national level, asking for compliance with the "essential requirements", including recyclability based on EN 13430 standard. However, EN 13430 does not go into detail on the various materials and recycling processes but requires verifying compatibility *with known and available recycling technologies*. The analysis conducted according to the Cepi method followed by an evaluation of the results (according to national or European evaluation systems, where available), allows to evaluate the compatibility with the most common paper recycling processes and therefore to obtain useful information to prove the compliance with the EN 13430.

2. How long does it take to complete a recyclability test according to the Cepi test method?

This depends from each laboratory staff to another and if the optional steps, such as Chemical Oxygen Demand (COD) and macro stickies are conducted. As well on the quality while picture taking and others.

3. When comparing version 1 to version 2, are there any changes in the technical data sheet? Is there additional documentation needed?

The technical data sheet was not available within the version 1 of the method, so it is a complete new part of the Annex. There is no additional document which needs to be filled in.

4. Is additional equipment needed when adapting to the version 2 of the test method?

Yes, the equipment needed for the filtrate analysis (Mainly a suction flask and specific defined filter paper). All is described in detail in the detailed work description.

5. How long would it take a lab to adapt from version 1 to version 2?

The method itself, except the additional filtrate analysis did not change a lot. Working according to version 2 does not involve much additional effort.

6. Which laboratories in Europe can run a test according to the Cepi test method?

See separate document available on Cepi website

7. What products can be tested by the Cepi method?

Paper and cardboard (such as, for example, rolls and sheets of paper intended for printing or paper converting, corrugated cardboard sheets intended for the production of packaging, reels of tissue paper intended for the production of handkerchiefs, etc.) which need further processing to become finished objects.

Packaging made of paper and board may include other non-cellulosic constituents up to 50% by weight.

8. If I have a range of products with different compositions, do I have to test all of them?

If the products are not made only of paper, you have to test each of them or you can test the most representative sample, i.e. the one, given a certain quantity and quality of paper, which in

proportion, is composed with the greater quantity of plastic, paint, lacquer, metallization, silicone, coating, etc.

If the product consists of coloured paper and if the nature of the substance which produces the colour (mass colouring or through a printing technique) does not change, it is not necessary to carry out different tests. In this case as a most representative sample it is sufficient to analyse the product with the most intense and darkest coloration.

If the product consists of printed paper and if the printing technique does not change, it is not necessary to carry out different tests. In this case as a "worst case" it is sufficient to analyse the product with the darkest and higher coverage print.

If a subsequent processing of the product affects the composition (for example if glues, labels, caps are added or if other prints of a different nature are added) the analytical result is not valid anymore and the test must necessarily be repeated. In this case, as most representative sample it is sufficient to analyse the product which, in proportion, is composed with the greater quantity of glue, labels, caps, ink, etc. compared to the weight of the paper.

9. Is it possible to test paper products with waxes, bitumen or oil?

The European standard EN 643:2014 provides that there are some prohibited materials that cannot be present in the paper to be recycled. Among these are bitumen, i.e. mixtures of natural hydrocarbons or residues deriving from the distillation or refining of crude oil. This definition therefore includes bituminous, tarred, waxed, paraffined paper and oiled paper. These types of paper cannot be analysed.

10. Does the test method look into the recyclability of adhesives and/or labels? If no, can you please elaborate why?

Yes, the method is assessing the recyclability of adhesives and or labels when they are part of a packaging, with the macro stickie assessment as well as with the sheet adhesion test.

11. Does the test method define what constitutes an adhesive and what does not constitute an adhesive?

The method is only referring to the definition of macro stickie, while referring to the ISO 15360-2. A definition of adhesives in general is not given.

12. Why is the macro stickies assessment optional? (please elaborate on the deviation of the results. Are deviations noticed in the same lab, or between different labs?)

Currently there are evaluation protocols based on the Cepi test method, which require the macro stickie assessment and others do not, for this reason it is optional.

The macro stickie assessment acc. to the ISO15360-2 is based on a method from the INGEDE, where graphic products are analysed. When including these criteria in the method for assessing packaging recycling in a standard paper mill standard deviations within labs and between laboratories could be observed. This may partly be due to methodological problems when the tested product includes particles, which interfere with the measurement, for instance samples with fragmented barrier coatings, metal particles, varnishes.

In 4evergeen different possibilities to deal with the issue in the future and recommendations for change are discussed.

13. If I have a range of paper with different grammages, do I have to test all of them?

If the product consists only of paper, recyclability is generally indifferent according to the grammage. It is therefore possible to use only one sample as a reference for the entire range of

grammages, provided that the composition and type of paper do not change. In this case as a representative sample it is sufficient to analyse the paper with a higher grammage. The nature, origin and type of paper, apart from the weight, must be the same.

14. Is it possible that the test does not generate a result?

Yes. In the event that it is not possible to carry out all the phases of the test method in compliance with the Cepi method or it is not possible to determine one or more measurement parameters due to issues related to the nature and/or characteristics of the sample, the test is interrupted and this is reported by the laboratory in the test report. This does not necessarily mean that the sample is not recyclable but that according to the Cepi method no analytical result can be provided.

Examples of these occurrences are:

- a) the resistance to pulping prevents the pulper from working or there is a risk of damaging the equipment;
- b) the presence of flakes or dense foams prevents the transfer of the mix to the subsequent stages;
- c) the presence of metal particles or coating distort the reading of the macro stickies
- d) the content of fibre is so poor that it does not allow to produce a recycled paper sheet sample.