

Leonhard Kurz

RECYCLASS TECHNOLOGY APPROVAL

Brussels, 23 November 2021

DISCLAIMER

RecyClass recognition applies only to Leonhard Kurz 'Cold Transfer with EP Platina 3015' technology reported in Annex I. It, therefore, does not concern to a recyclability assessment of specific packaging using this tube.

Any specific packaging using this tube would need to be tested individually to demonstrate that the system of resin, adjuvants, label, closure, and printing conforms to the RecyClass Recyclability Evaluation Protocol for HDPE containers, and that it is sorted in the HDPE rigid stream at the state-of-art sorting plants in Europe.

Publication of results of testing of this technology MUST clearly include all the conditions listed in the approval letter. Partial reporting of the conditions is forbidden.

Additionally, any change in the formulation of the technology must be communicated to the Technical Committee which will reassess the approval of the technology.

The RecyClass HDPE Technical Committee was requested to carry out an assessment of the technology 'Cold Transfer with EP Platina 3015' by Leonhard Kurz and EPL to verify its impact on the quality of recycled HDPE containers.

The technology is a laminated tube, provided with HDPE shoulders and PE cap. The tube is white-coloured and direct printed and decorated via cold transfer on approximately 70% of the tube surface (i.e. 0.63% of the total weight). The EVOH barrier concentration is about 4.4% of the tube body.

According to the results that were obtained from the laboratory test by the Institut für Kunststofftechnologie und -recycling (IKTR), carried out as per the Recyclability Evaluation Protocol for HDPE containers, the 'Cold Transfer with EP Platina 3015' technology is considered to be **fully compatible with coloured HDPE recycling**. Additionally, the sortability of the packaging has been successfully tested by Suez.Circpack® following the RecyClass Sorting Protocol¹.

Based on these results, RecyClass certifies that Leonhard Kurz 'Cold Transfer with EP Platina 3015' will have no negative impact on the current European HDPE containers recycling and provided that the packaging is designed under the following conditions:

- a) The tube and its shoulders are made of clear or white HDPE;
- b) The maximum EVOH concentration is below 4.4 wt% respect to the tube total weight;
- c) The density of the finished tube is lower than 1 g/cm³;

¹ [Sorting Evaluation Protocol for Plastic Packaging](#)

- d) The cap is made of clear or white PE;
- e) Cold transfer decoration represents up to 70% of the total body packaging surface coverage and is maximum 0.63% by weight of the total tube weight;
- f) The decoration is preferably silver coloured, or light color shade (such as gold, bronze colours);
- g) No additional printing technology are applied, and in any case, it is the responsibility of the end-user to choose an appropriate combination of inks and printing process to ensure that:
 - i. the inks are non-bleeding;
 - ii. the inks comply with the European Legislation (e.g. Packaging and Packaging Waste Directive on the heavy metal concentration levels) and are EUPIA compliant;
 - iii. direct printing is limited as much as possible (see Annex I);

RecyClass concludes that Leonhard Kurz 'Cold Transfer with EP Platina 3015' as per current market conditions and knowledge, is fully compatible with the existing European industrial recycling processes for coloured HDPE containers. Indeed, the recycled plastic generated after the recycling process was successfully tested in high-value application such as HDPE bottles up to 25% concentration².

Similar executions of 'Cold Transfer with EP Platina 3015' technology with the only modification of artworks would not have to be tested again as long as the cold transferred decoration amount and the components proportion remain the same.

About

RecyClass is a comprehensive cross-industry initiative that works to advance plastic packaging recyclability and to establish a harmonized approach towards recycled content calculation and traceability in Europe. Activities within RecyClass include the development of Recyclability Evaluation Protocols and scientific testing of innovative materials which serve as the base for the Design for Recycling guidelines and the free online tool. RecyClass offers Recyclability Certifications and Recycled Content Traceability Certification for plastic packaging.
Contact: Alice.Wallon@plasticsrecyclers.eu, www.recyclclass.eu

² [Recyclability Evaluation Protocol for HDPE containers](#)

Annex I



Cold Transfer with EP Platina 3015 with cap by Leonhard Kurz