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Gualapack
RECYCLASS PRODUCT APPROVAL

Brussels, 07 December 2021

DISCLAIMER

RecyClass recognition applies only to Gualapack 'Pouch5' product reported in Annex I. It, therefore, does not concern to a recyclability assessment of specific packaging using this pouch. Any specific packaging using this pouch 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 PP containers, and that it is sorted in the PP rigid stream at the state -of-art sorting plants in Europe.

Publication of results of testing of this product 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 product.

The RecyClass PP Technical Committee was requested to carry out an assessment of the product 'Pouch5' by Gualapack to verify its impact on the quality of recycled PP containers.

The product is a laminated pouch, provided with PP spout and PP cap. The white-coloured pouch direct printed with an amount of inks lowert than 1% of the total weight of the packaging. The EVOH barrier concentration is below 1% of the total weight of the packaging. Laminated adhesive is PU based, solvent based and represents less than 3.5 wt% of the total weight of the packaging.

According to the results that were obtained from the laboratory tests done by the Institut für Kunststofftechnologie und -recycling (IKTR), carried out as per the Recyclability Evaluation Protocol for PP containers, 'Pouch5' technology is considered to be <u>limited compatible with coloured PP recycling.</u>

Based on these results, RecyClass certifies that Gualapack 'Pouch5' product will have a limited impact on the current European PP containers recycling and provided that the full packaging is designed under the following conditions:

- a) The pouch and its spout are made of clear or white PP;
- b) The maximum EVOH concentration is below 1 wt%;
- c) The laminated adhesive is PU based, solvent based and represents less than 3.5 wt%;
- d) The direct printing represents less than 1 wt%;
- e) The density of the finished pouch is lower than 1 g/cm³;
- f) The cap is made of PP, preferably clear or white;
- g) The spout and the cap represent more than 57 wt% of the total weight of the packaging;

h) Applied printing technology is compatible with recycling; since several printing options are possible, 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 Gualapack 'Pouch5' product as per current market conditions and knowledge, is limited compatible with the existing European industrial recycling processes for PP containers. Indeed, the recycled plastic generated after the recycling process was successfully tested in injection moulding applications up to a concentration of 50% innovation¹.

According to the RecyClass Recyclability Methodology² developed by RecyClass, 'Pouch5' corresponds to a class ranking B. The slight penalisation is due to the amount (equal to 3.5 wt%) of solvent based laminated adhesive. An additional penalty may be applied in the case of an Easy-to-Empty index (EtEi) above 5%. However, this letter is not a certification and does not allow the use of the class ranking logo. Therefore, Gualapack is invited to contact one of the recognized Certification Bodies to get 'Pouch5' product certified.

Similar executions of 'Pouch5' product with the only modification of artworks and/or modification of the pouch sized would not have to be tested again as long as the ink 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:, www.recyclass.eu

¹ Recyclability Evaluation Protocol for PP containers

² Recyclability Methodology of RecyClass



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Annex I



RecyClass



Pouch5 by Gualapack