

P&G

RECYCLASS TECHNOLOGY APPROVAL

Brussels, 1 October 2025

DISCLAIMER

RecyClass recognition applies only to P&G 'LAZRmark' technology reported in Annex I. The recyclability assessment therefore does not refer to the testing of a specific packaging using this technology. Any specific packaging using this technology 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 'LAZRmark' by P&G to verify its impact on the quality of recycled HDPE containers.

The technology is a white laser-marked HDPE bottle without cap. The bottle is laser-marked back side with 65 % coverage, representing up to 29,000 marks/gram. The laser-marking technology uses TiO₂ reduction leading to a light grey colour. TiO₂ represents 1.7 wt% of the total weight of the packaging. Antistatic additive is also present and represents 0.3 wt% of the total weight of the packaging.

According to the results that were obtained from the laboratory tests done by the Plastics Forming Enterprises (PFE), carried out as per the Recyclability Evaluation Protocol for HDPE containers (version 5.0), 'LAZRmark' technology is **fully compatible with white and coloured HDPE recycling**. Additionally, the sortability of the packaging has been successfully tested by Nationaal Testcentrum Circulaire Plastics (NTCP) following the RecyClass Sorting Protocol¹. The samples were sorted as HDPE rigid with an efficiency equal or greater than 80 %.

Based on these results, RecyClass acknowledges that P&G 'LAZRmark' technology will have no impact on the current European white and coloured HDPE containers recycling and provided that the full packaging using this technology is designed under the following conditions²:

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

² HDPE containers designed under conditions other than those indicated need to be tested to assess their compliance with RecyClass Recyclability Evaluation Protocol for HDPE containers.

- a) The bottle is made of PE, with a prevalence of HDPE;
- b) The final density of the packaging is lower than 1 g/cm³;
- c) The laser-marking technology uses TiO₂ reduction;
- d) The laser-marking technology is used with a coverage of 65 % limited to one side of the bottle, representing up to 29,000 marks/gram, or less;
- e) Any additional component or features (inks, coating, etc.) of the packaging must be compliant with the corresponding RecyClass Design for Recycling Guidelines³.

RecyClass concludes that P&G 'LAZRmark' technology as per current market conditions and knowledge, is fully compatible with the existing European industrial recycling processes for white and 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 % concentration⁴.

In regard to RecyClass Recyclability Certification, the present full compatibility with white and coloured HDPE containers recycling delivered to P&G 'LAZRmark' technology, means that a packaging made of this technology as mentioned in the aforementioned conditions will not be penalised with any Recyclability Class deduction. Moreover, the amount of recyclable PE will impact the final recyclability class obtained during Recyclability Certification and should be kept above 95 % or 80 % to maximise chances to get a Recyclability Certificate with a Class A or B, respectively⁵. Also, it should be noteworthy that the presence of additional packaging features, such as inks or closure, could impact the certification process.

About RecyClass

RecyClass is a non-profit, cross-industry initiative advancing recyclability, bringing transparency to the origin of plastic waste and establishing a harmonized approach toward recycled plastic calculation & traceability in Europe. RecyClass develops Recyclability Evaluation Protocols and scientific testing methods for innovative plastic packaging materials which serve as the base for the Design for Recycling Guidelines and the RecyClass Online Tool. RecyClass established Recyclability Certifications for plastic packaging, Recycling Process Certification and Recycled Plastics Traceability Certification for plastic products.

[RecyClass – Plastic Future is Circular](#)

Follow the latest news on RecyClass channels: [LinkedIn](#) | [YouTube](#)

Contact : carolane.gerbehaye@plasticsrecyclers.eu, www.recyclass.eu

³ [Design for Recycling Guidelines – RecyClass](#)

⁴ [Recyclability Evaluation Protocol for HDPE containers](#)

⁵ [RecyClass Recyclability Certification](#)

Annex I



Figure 1. 'LAZRmark' technology by P&G.