

RecyClass

Amway

RECYCLASS TECHNOLOGY APPROVAL

Phone: +32 2 786 39 08 info@recyclass.eu www.recyclass.eu

Brussels, 17 December 2025

DISCLAIMER

RecyClass recognition applies only to Amway 'PP closure on HDPE bottle' technology reported in Annex I. The recyclability assessment therefore does not refer to the testing of a specific packaging using this closure. Any specific packaging using this technology would need to be assessed individually to demonstrate that the system of resin, adjuvants, label, closure, and printing conforms to the RecyClass Design for Recycling Guidelines or 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 'PP closure on HDPE bottle' by Amway to verify its impact on the quality of recycled HDPE containers.

The technology is a white PP closure on a white HDPE bottle. The cap represents 27 wt% of the total weight of the packaging. The packaging has been tested unprinted.

According to the results that were obtained from the laboratory tests done by Plastics Forming Enterprises (PFE), carried out as per the Recyclability Evaluation Protocol for HDPE containers (version 6.0), 'PP closure on HDPE bottle' technology is <u>limited compatible with white and coloured HDPE recycling.</u>

Based on these results, RecyClass acknowledges that Amway 'PP closure on HDPE bottle' technology will have a limited 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 conditions¹:

- a) The packaging is made of PE, with a prevalence of HDPE;
- b) The final density of the packaging is lower than 1 g/cm³;
- c) The PP cap represents 27 wt% of the total weight of the packaging, or less;

¹ 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.

d) Any additional component or features (inks, coating, etc.) of the packaging must be compliant

with the corresponding RecyClass Design for Recycling Guidelines².

RecyClass concludes that Amway 'PP closure on HDPE bottle' technology as per current market

conditions and knowledge, is limited 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 %

concentration³.

In regard to RecyClass Recyclability Certification, the present limited compatibility with white and

coloured HDPE containers recycling delivered to Amway 'PP closure on HDPE bottle' technology,

means that a white or coloured packaging made of this technology as mentioned in the

aforementioned conditions will be penalised with one 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 B or C, respectively⁴. Also, it should be noteworthy that the presence of

additional packaging features, such as inks or labels, 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 harmonised approach toward recycled plastic calculation & traceability in Europe. RecyClass develops Recyclability Evaluation Protocols and scientific testing methods for innovative plastic materials which serve as the base for the Design for Recycling Guidelines and the RecyClass Online Tool. RecyClass established Recyclability Certifications for plastic

packaging, Sorting Process, Recycling Process, and Recycled Plastics Traceability Certifications for plastic products.

RecyClass - Plastic Future is Circular

Follow the latest news on RecyClass channels: <u>LinkedIn | YouTube</u>

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

² <u>Design for Recycling Guidelines - RecyClass</u>

³ <u>Recyclability Evaluation Protocol for HDPE containers</u>

⁴ RecyClass Recyclability Certification

RecyClass

Avenue de Broqueville 12 1150 Brussels, Brussels Phone: +32 2 786 39 08 info@recyclass.eu www.recyclass.eu

Annex I



Figure 1. 'PP closure on HDPE bottle' technology by Amway.

