

RECYCLASS TECHNOLOGY APPROVAL

Essel Deutschland

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DISCLAIMER

RecyClass recognition applies only to Essel 'Platina 2515' 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 'Platina 2515' by Essel to verify its impact on the quality of recycled HDPE containers.

The technology is a multi-layer laminate tube made with EVOH barrier concentration of 4.9 % of the total weight of the package.

According to the results that were obtained from the laboratory tests done by Plastics Forming Enterprise (PFE) and carried out as per the APR HDPE Critical and Application Guidance testing protocols, 'Platina 2515' technology is <u>fully compatible with HDPE recycling</u>.

Based on these results, RecyClass acknowledges that Essel 'Platina 2515' technology will not have a negative impact on the current European HDPE containers recycling stream and provided that the packaging is designed under the following conditions¹:

- a) The body is made of PE and it is white;
- b) The functional barrier is lower or equal to 5 % by weight respect to the total weight of the packaging;
- c) The density of the finished packaging is lower than 1 g/cm³;
- d) Closures, liners, seals and valves, as well as any other components are made of PE;

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.

e) Any additional component or feature of the packaging must be compliant with the

corresponding RecyClass Design for Recycling Guidelines².

RecyClass concludes that Essel 'Platina 2515' technology as per current market conditions and

knowledge, is fully compatible with the existing European industrial recycling processes for 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.

RecyClass concludes that Essel 'Platina 2515' technology as per current market conditions and

knowledge, is fully compatible with the existing European industrial recycling processes for HDPE

containers. Moreover, the amount of recyclable PE will impact the final Recyclability Class obtained

during Recyclability Certification and should be kept above 95 % or 90 % in the final packaging to

maximise chances to get a Recyclability Certificate with a Class A or B, respectively ⁴. Also, it is

noteworthy that the presence of additional packaging features 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

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² Design for Recycling Guidelines - RecyClass

³ Recyclability Evaluation Protocol for HDPE containers

⁴ RecyClass Recyclability Certification



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