

Procter & Gamble
RECYCLASS TECHNOLOGY APPROVAL

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DISCLAIMER

RecyClass recognition applies only to Procter & Gamble 'Mr Propre Ultra Power' technology reported in Annex I. The recyclability assessment therefore does not refer to the testing of a specific artwork or size of this packaging. Any changes in the formulation of this packaging, not falling under the scope of this approval letter, 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 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 product must be communicated to the Technical Committee which will reassess the approval of the product.

The RecyClass HDPE Technical Committee was requested to carry out an assessment of "Mr Propre Ultra Power" bottle without the trigger to verify its impact on the quality of recycled HDPE containers.

The innovative packaging is a HDPE bottle with a decorated full body shrink PET-g sleeve for a multipurposes cleaner without any trigger. PET-g sleeve represents 10.7 % of the total weight of the packaging.

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 containers¹, 'Mr Propre Ultra Power' bottle without the trigger is <u>fully compatible with HDPE recycling</u>. Also the sortability of the packaging has been successfully tested by Suez.Circpack® following the RecyClass sorting protocol².

Based on these results, RecyClass acknowledges that Procter & Gamble full body sleeve bottle without trigger "Mr Propre Ultra Power" will not have a negative impact on the current European HDPE containers recycling provided that the full packaging using this bottle as body is designed under the following conditions:

a) The body is made of clear/natural or white HDPE;

¹ RecyClass Recyclability Evaluation Protocol for HDPE Containers

² RecyClass Sorting Evaluation Protocol for Plastic Packaging

b) No functional barriers are included in the body (i.e. EVOH, PA, PVDC);

c) The density of the finished bottle is lower than 1 g/cm³;

d) The sleeve represents less than 10.7 % of the total weight of the packaging and is made from

PET-g, applied without any adhesive and its thickness and colour don't hinder the HDPE bottle

to be detected by NIR devices;

e) The closure system is preferentially made of PE, or made of a combination of PE and PP;

f) Any additional component or features (e.g. inks) of the packaging must be compliant with the

corresponding RecyClass Design for Recycling Guidelines³.

RecyClass concludes that Procter & Gamble 'Mr Propre Ultra Power' bottle 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 % concentration.

In regard to RecyClass Recyclability Certification, the present full compatibility with HDPE containers

recycling delivered to Procter & Gamble 'Mr Propre Ultra Power' technology, means that a packaging

containing this technology as mentioned in the aforementioned conditions will not be penalised with

any Recyclability Class downgrade. 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,

respectively⁴. 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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³ <u>Design for Recycling Guidelines - RecyClass</u>

⁴ RecyClass Recyclability Certification



<u>Annex I</u>



Figure 1: 'Mr Propre Ultra Power' full sleeved bottle by Procter & Gamble.