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Multi Colour Corporation RECYCLASS/EPBP TECHNOLOGY APPROVAL

Brussels, 18 April 2023

DISCLAIMER

RecyClass and EPBP recognition applies only to Multi Colour Corporation 'RecycLABEL® Floatable SSL Gravure 40951' technology reported in Annex I. The recyclability assessment therefore does not refer to the testing of a specific packaging using this sleeve. Any specific packaging using this sleeve would need to be tested individually to demonstrate that the system of resin, adjuvants, label, closure, and printing conforms to the Recyclability Evaluation Protocol and Quick Tests for PET bottles, and that it is sorted in the PET bottle 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 PET Technical Committee (TC) and EPBP TC were requested to carry out an assessment of the technology *'RecycLABEL® Floatable SSL Gravure 40951'* by Multi Colour Corporation to verify its impact on the quality of recycled PET bottles.

The technology is a shrink sleeve applied on a PET bottle. The shrink sleeve is polyolefin-based. The sleeve was fully printed using a nitrocellulose solvent-based ink applied by rotogravure.

According to the results that were obtained from the laboratory test by Plastic Technologies Inc. (PTI), carried out as per the EPBP QT 502 – Sink-Float Separation Test and QT 507 – Bleeding Label¹, the 'RecycLABEL® Floatable SSL Gravure 40951' technology is considered to be <u>fully compatible with PET</u> <u>recycling.</u>

Based on these results, RecyClass and EPBP acknowledge that Multi Colour Corporation 'RecycLABEL® Floatable SSL Gravure 40951' will have no negative impact on the current European PET bottles recycling and provided that the packaging is designed under the following conditions:

- a) The bottle is made of PET;
- b) The density of the printed shrink sleeve is lower than 1 g/cm^3 ;
- c) The sleeve should not cover more than 70% of the bottle surface for PET bottles of 500 ml and above; and not more than 50% for PET bottles smaller than 500 ml;
- d) Ink is applied by rotogravure and is not bleeding nor washed off during PET washing treatment;

¹ Quick Tests: QT 502 & QT 507

- e) The label substrate or the printing ink are not metallized;
- f) Since the RecyClass/EPBP evaluation refers to a specific film and ink combination, while 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 the inks:
 - i. Are non-bleeding;
 - ii. Have high chemical resistance;
 - iii. Have very low migration;
 - iv. Comply with the European Legislation (e.g Packaging and Packaging Waste Directive on the heavy metal concentration levels).

RecyClass and EPBP conclude that Multi Colour Corporation 'RecycLABEL® Floatable SSL Gravure 40951' as per current market conditions and knowledge, is fully compatible with the existing European industrial recycling processes for PET bottles.

Similar executions of 'RecycLABEL® Floatable SSL Gravure 40951' technology with the only modification of artworks would not have to be tested again as long as the direct printing decoration amount and the components proportion remain the same.

In regard to RecyClass Recyclability Certification, the present full compatibility with PET bottles recycling approval delivered to Multi Colour Corporation 'RecycLABEL® Floatable SSL Gravure 40951' technology, means that a packaging containing the Multi Colour Corporation 'RecycLABEL® Floatable SSL Gravure 40951' as mentioned in the aforementioned conditions will not be penalised with a Recyclability Class downgrade. Nevertheless, the amount of recyclable PET and POs will impact the final Recyclability Class obtained during Recyclability Certification². Also, it should be noteworthy that the presence of additional packaging features could impact the certification process.

The RecyClass PET TC and EPBP TC remind that the presence of such shrink sleeves on top of a PET bottle must not hamper the sorting of the underlying PET bottle in its corresponding stream.



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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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About EPBP

EPBP is a Platform that consists of technical experts in the field of PET production, design and recycling, whose only objective is the evaluation of new technologies and providing an independent and confidential assessment of their impact on the PET recycling processes across Europe. EPBP has established several test procedures in order to assess the impact on recycling of new packaging technologies. Products that pass the tests should not cause any problems during recycling. Contact : www.epbp.org; argiris.dabanlis@petcore-europe.org



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<u>Annex I</u>



Figure 1. 'RecycLABEL® Floatable SSL Gravure 40951' developed by Multi Colour Corporation



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