

Brussels, 18 May 2020

The Technical Committee of the European PET Bottle Platform (EBPB) was requested to evaluate the effect of fluorescent bottles on the quality of recycled PET.

After extensive evaluation of the data supplied, the Technical Committee of the EPBP decided not to endorse the use of fluorescent dyes/pigments in PET bottles for the following reasons:

- Fluorescent PET bottles should be avoided as even small traces of fluorescence could become visible under e.g. fluorescent lighting in retail stores. Fluorescence limits the use of rPET in applications such as bottles, film, sheet and fibre.
- New techniques are being developed to improve the sorting efficiency of plastic packaging by using fluorescent markers (tracers), either directly in the material matrix or in sleeves. Current sorting technology can detect luminescence from these fluorescent markers and separate marked objects from non-marked objects. By using a unique combination of fluorescence markers, polymers can be identified by its material, colour, application, structure, additives, etc. If these technologies can be made to work efficiently under industrial conditions, it enables the detection of materials that today are difficult to separate.
- Fluorescent PET bottles could impede the detection and separation based on fluorescence markers and may lead to misdetections. Consequently, this will increase the difficulty in separation of containers and will reduce recycled PET quality.

The EPBP reserves the right to update and change the conditions of this opinion at any time in accordance to the most recent technologies, assessments and experience.

The European PET Bottle Platform EPBP is a voluntary industry initiative that provides PET bottle design guidelines for recycling, evaluates PET bottle packaging solutions and technologies and facilitates understanding of the effects of new PET bottle innovations on recycling processes. This initiative fully supports the economic and environmental sustainability of the European PET value chain.

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