



Brussels, January 20th, 2021

The Technical Committee of the European PET Bottle Platform (EPBP) was requested by REPI to assess the effect of REMAP UV 00394 UV barrier additive on the quality of recycled PET.

Clear PET offers limited protection against ultraviolet (UV) radiation, present in natural light or in certain types of artificial light. Some beverages contain ingredients, such as vitamins, colourants and flavourings, that are sensitive to UV radiation. UV barrier additives enhance PET barrier properties to ultraviolet radiation in the range of wavelengths between 315 and 400 nm, i.e. the UV-A spectral region, complementing the PET intrinsic barrier to UV radiation at wavelengths shorter than 315 nm. The UV radiation barrier enhancement allows the achievement of longer shelf life to these sensitive products when packaged in clear PET bottles.

Data supplied from test carried out according to the EPBP testing protocol on bottle samples provided by REPI demonstrated that processing conditions and bottle performances are not affected by levels of REMAP UV 00394 up to a maximum of 0.2%. Higher additive loadings might result in unacceptable discoloration of recycled PET.

Based on the EPBP assessment's outcome and current market's knowledge in 2020, the European PET Bottle Platform (EPBP) concludes that the use of REMAP UV 00394 UV barrier additive will not have a negative impact on current European PET recycling provided it is used under the following conditions:

- the overall REMAP UV 00394 UV barrier additive loading in PET must not exceed 0.2%;
- the concentration of bottles containing UV barrier additives is limited at a level up to 5% in the whole PET bottle market. This market penetration rate is taking local accumulation effects into consideration.

The EPBP reserves the right to update and change the conditions of this technical opinion at any time, upon prior notice to REPI, 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. The EPBP initiative fully supports the economic and environmental sustainability of the European PET value chain.*