



Brussels, 26 November 2020

The Technical Committee of the European PET Bottle Platform (EPBP) was requested by Nestlé Waters to assess the effect of polyxylylene adipamide (a semi-aromatic polyamide also known as Nylon-MXD6 or MXD6) on the quality of recycled PET.

Polyxylylene adipamide based polymers are used to enhance the barrier properties of PET, either blended with PET or as internal layers in multilayer structures. The assessment refers to the use of polyxylylene adipamide based polymers as constituents of the middle layer in a three-layer multilayer PET bottle.

Data supplied from test carried out according to the EPBP testing protocol on bottle samples provided by Nestlé Waters demonstrated that processing conditions and bottle performances are not affected by levels of polyxylylene adipamide up to 6%. Residual colour is the only limiting factor.

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 polyxylylene adipamide will not have a negative impact on current European PET recycling provided they are used under the following conditions:

- the overall polyxylylene adipamide content must not exceed 6%;
- Polyxylylene adipamide based polymer must be used only as middle layer in three-layer multilayer PET bottles, without using a tie layer;
- Polyxylylene adipamide must be used only in coloured bottles (i.e. bottles that are neither clear nor light blue) that are not likely to enter the PET bottle stream that is recycled into food contact applications;
- the concentration of these bottles 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 Nestlé Waters, 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.*