

Recommendations of European Bioplastics on

GUIDANCE ON THE IMPLEMENTATION OF THE EU SINGLE-USE PLASTICS DIRECTIVE

The Directive on the reduction of the impact of certain plastic products on the environment (Directive 2019/904; "SUP Directive") entered into force on 3 July 2019. Member States have two years to bring into force the laws, regulations and administrative provisions to comply with the SUP Directive, i.e. they have to transpose the SUP Directive by 3 July 2021.

Art. 12 of this Directive calls on the EC to prepare guidelines on what is to be considered a single-use plastic product for the purpose of the Directive by 3 July 2020 in order to provide national authorities and economic operators with technical and legal clarifications, along with illustrative examples to ensure harmonized interpretation of single-use plastic products in accordance with the SUP Directive.

European Bioplastics (EUBP) provides the subsequent recommendations following the 2nd stakeholder workshop, which took place on 3 April 2020, in form of a webinar titled: "Webinar on guidance on identifying and describing the products covered by the Single-Use Plastics (SUP) Directive - Work package 1: Identifying and describing the products covered by the Directive". These recommendations on the one hand relate to the terms and definitions and, on the other, to the objectives and scope of the SUP Directive. They are summarized in an overview below, followed by brief depiction of their rationale.

Overview of EUBP recommendations

1. Terms and definitions

a) "Natural polymer"

Polymers obtained from biomass, in which the polymer retains the original chemical structure and composition present in the biomass¹ and polymers manufactured in industrial settings/

processes similar to natural processes, e.g. fermentation or enzymatic conversions, with the same chemical identity as polymers present in nature, shall be considered natural polymers.

b) "not been chemically modified"

The interpretation of potential chemical modification shall refer to the end stage of the manufacturing process.

2. Objectives and scope

a) Plastic coatings shall not be considered a main structural component. Therefore, products consisting of non-plastic materials with a plastic coating shall not fall under the scope of the SUP Directive.

b) Art. 6 (5) (b) should read:

"... from 2030, beverage bottles listed in Part F of the Annex contain at least 30 % recycled and/or bio-based plastic,..."

c) Annex Part B (2) and (3) should be transferred to Annex Part A.

Rationale for EUBP recommendations

1. Terms and definitions

a) "Natural polymer"

Polymers obtained from biomass, in which the polymer retains the original chemical structure and composition present in the biomass and polymers manufactured in industrial settings/ processes similar to natural processes, e.g. fermentation or enzymatic conversions, with the same chemical identity as polymers present in nature, shall be considered natural polymers.

¹ Definition of "natural polymer" from ISO 16620-1.

Rationale:

Using ECHA's definition of 'natural polymer', outlined in the Guidance on monomers and polymers as "polymers which are the result of a polymerisation process that has taken place in nature, independently of the extraction process with which they have been extracted" to characterise a substance that does not fully comply with this narrow definition as a plastic for the purposes of the SUP Directive is neither necessary nor proportionate. Instead, in order to qualify as a natural polymer in the sense of the SUP Directive and to demonstrate the same environmental harmlessness as polymers, whose polymerisation process has taken place in nature, also biotechnological processes in a controlled environment resulting in polymers with identical chemical structures, are just as valid. The aim is to prove environmental effects equal to those polymerised in nature, among other, their intrinsic biodegradability, i.e. the ability of the material to be depolymerised and assimilated by microorganisms.

b) "not been chemically modified"

The interpretation of potential chemical modification shall refer to the end stage of the manufacturing process.

Rationale:

The very fact that, currently, ECHA itself allows for different options of defining an element to be 'not chemically modified' to be deemed acceptable clearly shows that the choice of the adequate definition must always be made taking into consideration and in line with the intended goal of the underlying context.

In order to be in line with the intention of the SUP Directive, i.e. 'the reduction of the impact of certain plastics on the environment', only the final state of the polymer in question should be of relevance. The process itself, as long as it is completely reversible, is negligible.

After all, chemical modification means that covalent bonds of the polymer are eventually changed in a way that it differs from the original structure. If, however, the starting polymer and the final polymer show the same chemical structure, it cannot be called modified

2. Objectives and scope

a) Plastic coatings shall not be considered a main structural component. Therefore, products consisting of non-plastic materials with a plastic coating shall not fall under the scope of the SUP Directive.

Rationale:

Article 3(1) of the SUP Directive provides a questionable definition of the term 'plastic'. Questionable in the sense that, contrary to the intention of linking two different aspects that both need to be fulfilled at the same time in order to constitute the basis for decision, the second requirement is always given, depicted by the use of the word "can". As a polymer always *"can"* function as a main structural component of final products, the definition of 'plastic' is, therefore, reduced to 'a material consisting of a polymer as defined in point 5 of Article 3 of Regulation (EC) No 1907/2006, to which additives or other substances may have been added'.

However, if it may be reasonably assumed that the legislator had intended to define the term 'plastic' to be conditional to adhering to both prerequisites, the word "can" would need to be omitted or replaced by the word "will". Only then the definition would make sense.

According to the existing definition, a paper cup coated with a plastic lining is automatically characterized as a plastic product – not because the coating constitutes a main structural component, but merely because the plastic component used *could* have been used in a way that it would constitute a main structural component.

With a plausible definition of the characteristic 'plastic' in place, the use of a plastic coating/lining on e.g. paper cups or plates would no longer necessarily automatically define the whole product as a plastic, as this specification would suddenly be subject to the interpretation of the term 'main structural component', with an emphasis on the word *main*.

As both, an uncoated paper cup and plate, can perfectly well serve in their function to hold and transport – especially dry – foodstuffs, the element of coating is reduced to merely a 'structural component', and no longer a '*main* structural component'. This, in turn, will lead to the situation where a paper cup or plate coated with plastic is not defined as a plastic product in its entirety and, therefore, be out of the scope of the SUP Directive. This should be the case for all coatings, but, in particular, for bio-based and biodegradable ones.

b) Art. 6 (5) (b) should read:

“... from 2030, beverage bottles listed in Part F of the Annex contain at least 30 % recycled *and/or bio-based plastic*,...”

Rationale:

While the mandatory requirement for bottles placed on the market after 2030 to contain a minimum of 30% recycled content may be reasonable with regard to commodity plastics available in the market since decades, the same provision is bound to nip the development of sustainable innovative materials in the bud. New materials, no matter how superior their properties may be, would be prevented from entering the market, because, by its very nature, they will not have a separate recycling stream and, therefore, no quantities of recyclates to employ.

In order to reduce the environmental impact of extracting fossil fuels for the manufacturing of plastic, the promotion of recycled content is, undisputedly, the first choice. However, it must be kept in mind that plastics cannot be recycled indefinitely, as the polymer chains will shorten with each cycle and, eventually, no longer be useful. Therefore, there will always be the need to employ virgin material in order to guarantee the performance requirements of a polymer, especially when used, e.g. for carbonated drinks.

In order to allow for both, the introduction of new and sustainable materials to enter the market, as well as to ensure a continuous recycling of the polymers for the fabrication of plastic bottles, the use of bio-based feedstock should be promoted in the exact same way as the use of recyclates.

c) Annex Part B (2) and (3) should be transferred to Annex Part A

Rationale:

The SUP Directive currently foresees that ‘Member States shall prohibit the placing on the market of single-use plastic products...’ (Article 5) for which ‘suitable and more sustainable alternatives that are also affordable are readily available.’ (Recital 15). These single-use products are listed in Annex Part B of the SUP Directive and include (2) cutlery (forks, knives, spoons, chopsticks) as well as (3) plates.

However, when assessing the suitability and sustainability of alternatives for cutlery and plates, the necessary due diligence

was not fully observed. Alternative materials, e.g. bamboo, for the production of single-use cutlery and plates, which were deemed to be suitable substitutes for (compostable) plastic cutlery and (coated paper) plates, have been proven not to fulfil the health and safety requirements designed for food contact².

Furthermore, there remain situations where the substitution of single-use cutlery and plates by reusable alternatives are not suitable due to health and safety reasons (e.g. in prisons, where reusable knives can pose a threat to fellow inmates, or in hospitals in case of e.g. highly infectious diseases).

Therefore, a complete ban of single-use cutlery and plates as foreseen by the SUP Directive constitutes an excessive and inadequate measure. Instead, the consumption of single-use cutlery and plates should be reduced where possible and limited to situations where necessary.

Given that, by nature, single-use cutlery and plates are bound to be contaminated with food waste and, therefore, will not be (mechanically) recycled – at best, they will be incinerated with energy recovery, at worst, they will be landfilled –, apart from ‘natural polymers that have not been chemically modified’ as outlined above, only compostable solutions, certified according to EN 13432 as biodegradable in industrial composting facilities, should be allowed.

EUBP urges the EC to take into consideration its arguments regarding the interpretation of the terms and definitions of ‘natural polymers that have not been chemically modified’ in the guidelines. Furthermore, even though the rationales brought forward regarding Article 6 (5) (b) and Annex Part B (2) and (3) merit their instant revision, EUBP asks the EC to adequately adapt these two measures at the latest during the next revision of the Directive in 2025.

About European Bioplastics

European Bioplastics is the association representing the interests of the bioplastics industry along the entire value chain in Europe. Its members produce, refine, and distribute bioplastics, i.e. plastics that are either bio-based, biodegradable, or both. More information is available on www.european-bioplastics.org.

² See enclosed parliamentary question to the EC: http://docs.european-bioplastics.org/Parliamentarian-questions-to-the-EC_Q_Cindy_Fransen_E-9-2020-000642_EN.pdf