



BACKGROUND AND OUR POSITION

- The European Commission has thus far not settled on its guidance concerning the definition of the terms “**natural polymer**” and “**not chemically modified**” in relation to plastic under the Single-Use-Plastic Directive (SUP Directive)
- Support for innovation in new materials to replace plastics requires a pragmatic approach in its definitions to encourage the development of more sustainable alternatives going forward. This approach is best suited to achieving the SUP Directive’s aims.

PLASTICS DEFINITION

- When providing clear guidelines on the definition of plastic under the SUP Directive, the Commission should provide a clear and predictable level playing field, fostering research and innovation in the material development of natural based polymers which may eventually represent better alternatives to plastic used today, thereby reducing the environmental impact caused by plastics.
- Recital 16 explicitly states that “innovation and product development are expected to provide viable alternatives to filters containing plastic which need to be accelerated”, the Guidelines on the definition of single use plastics by the Commission do take this expectation set by the Legislator into account.
- We ask the Commission to adopt an approach which encourages and fosters innovation, as opposed to applying an overly strict and too broad interpretation of the definition, thereby adhering to the spirit of the SUP Directive and helping to achieve its overall aim.

INTERPRETATION OF NATURAL POLYMERS

We ask the Commission to interpret the definition of natural polymers in a way that the composition and chemical structure of the end point of the material determines whether it should ultimately fall within the scope of the SUP Directive.

- Recital 11 of the SUP Directive explains that the term “not chemically modified substances” should be understood in accordance with Article 3(40) of the REACH Regulation, which states:
“not chemically modified substance means a substance whose chemical structure remains unchanged, even if it has undergone a chemical process or treatment, or a physical mineralogical transformation, for instance to remove impurities.”
- Article 3(40) stipulates that the process by which polymerisation takes place (i.e. in nature) should not be the determining factor for defining a material as a plastic, the determining factor should be the end product.

Any subsequent reference to Article 3(39) of the REACH Regulation should be considered not applicable as it is not specifically referenced in the SUP Directive nor does it support the need for innovation that the Directive has highlighted as a key part of the solution to the issue of single use plastics.

Article 3(39) specifies a restrictive list of permitted processing steps (*‘processed only by manual, mechanical or gravitational means, by dissolution in water, by flotation, by extraction with water, by steam distillation or by heating solely to remove water, or which is extracted from air by any means’*). Innovation will be severely restricted, if not impossible, if the processing techniques available are limited to this extent and will also severely limit the use of more environmentally friendly materials such as paper or cardboard, thereby impacting also upon packaging materials. Packaging plays a crucial role in the avoidance of food waste and this could lead to significant unintended waste in food supply chains. No text will be able to capture the variety of processing stages available without harming innovation or quickly becoming obsolete as technology advances; this issue further supports the use of the final form of the material in assessing whether it should be included in the scope of the Directive.

INTERPRETATION OF CHEMICALLY MODIFIED

The Commission's consultants, RAMBOLL, have proposed 3 interpretations for "not been chemically modified":

1. A strict interpretation where no modification is allowed even during the extraction process.	We object to this proposal as it is too restrictive and will stifle innovation.
2. An interpretation that refers to a process in which no intentional change occurs in any stage of the manufacturing process. The changes which occur due to the extraction process are not considered as intentional changes and therefore not to affect the status of the extracted substance as a 'natural polymer'.	We object to this proposal as it is too restrictive and will stifle innovation.
3. An interpretation that refers to the end stage of the manufacturing process. The changes occurring during the manufacturing process are not considered relevant, the end product of the manufacturing should be considered when determining the status of the polymer.	We support this position as it allows sufficient room for innovation and research into more environmentally friendly materials thereby fulfilling the spirit and objective of the SUP Directive.

- ECHA's interpretation of what represents a 'chemical modification' is too restrictive. Looking into article 3(40) of REACH for example we see that chemical modification is not clarified as to whether it has temporarily taken place or not. The modification of any given polymer should not be the deciding criteria. Rather, the objective of the Directive, which is environmental protection chemical modification should be linked to end of life performance (biodegradation) of any given polymer.
- The several interpretations currently discussed, referring to the strict/medium strict interpretation, do not provide sufficient guidance, unless additional guidance is recommended. If no such guidance is provided then the context of Recital 16 remains theoretical without giving manufacturers technical guidance to develop more sustainable materials. In the same context, the generic statement that any natural polymer that undergoes "industrial processing" would automatically be classified as a plastic is not constructive. In fact, industrial processing is used on almost everything used by consumers today.

Several interpretations possible:

1. Strict interpretation → no modification is allowed, even during the extraction process.
2. Medium strict interpretation → no intentional change occurs in any stage of the manufacturing process.
3. Less strict interpretation → based on the end stage of the manufacturing process